

PROCEEDINGS OF THE SYMPOSIUMS OF THE  
MUSEUM OF DACIAN AND ROMAN CIVILISATION, DEVA



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## ARCHAEOLOGICAL SMALL FINDS AND THEIR SIGNIFICANCE

PROCEEDINGS OF THE SYMPOSIUM:  
COSTUME AS AN IDENTITY EXPRESSION

EDITORS:

IOSIF VASILE FERENCZ  
NICOLAE CĂTĂLIN RIȘCUȚA  
OANA TUTILĂ BĂRBAT



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The authors are responsible for the contents.

## CONTENTS

|   |     |
|---|-----|
| Foreword  | 7   |
| <b>Selena Vitezović</b><br>Personal Ornaments in the Vinča Culture: The Case Study of Vitkovo and Stragari  | 9   |
| <b>Diana-Maria Sztancs, Corneliu Beldiman</b><br>Aeneolithic Necklace Made of Shell Beads Discovered at Ariuşd, Covasna County  | 23  |
| <b>Cristian Ioan Popa</b><br>Stone Pendants from Coţofeni Culture   | 35  |
| <b>Antoni Marc, Ioan Alexandru Bărbat</b><br>An Anthropomorphic Clay Figurine Discovered at Şoimuş – “Teleghi”, Hunedoara County  | 49  |
| <b>Victor Sava, Luminiţa Andreica</b><br>Social Identity in the Lower Mureş Valley During the Late Bronze Age: Two Seal-Headed Pins from Pecica “Site 14” Cemetery  | 55  |
| <b>Aurel Rustoiu, Adrian Ursuţiu</b><br>Indigenous and Celtic Garment Assemblages in Banat and the Surrounding Areas at the Beginning of the La Tène Period (Observations Regarding the Silver Spiral Earrings) | 89  |
| <b>Aurel Rustoiu</b><br>Double Costumes in Female Burials from the Carpathian Basin. Comments Regarding Some Garment Assemblages from Fântânele (Romania) and Brežice (Slovenia)                                | 103 |
| <b>Vasile Iarmulschi, Octavian Munteanu</b><br>Observations Regarding the Wear of Fibulae in Poienişti-Lucaşeuca Culture  | 117 |
| <b>Corneliu Beldiman, Iosif Vasile Ferencz, Diana-Maria Sztancs</b><br>Dacian Osseous Materials Artefacts Discovered at Ardeu-“Cetăţuie”, Hunedoara County. Decorated Red Deer Antler Plate                     | 131 |
| <b>Oana Tutilă Bărbat, Nicolae Cătălin Rişcuţa, Costin-Daniel Țuţuianu</b><br>A Dalmatian Type Brooch Discovered at Roşia Montană   | 149 |

|  |     |
|--|-----|
| <b>Lavinia Grumeza</b>                                       |     |
| Roman Beads Found in Tibiscum                                | 157 |
| <b>Silviu Oța</b>  |     |
| New Contributions on the Earrings Decorated with Curled Wire | 179 |
| Abbreviations  | 195 |

## FOREWORD

In 2008, Cătălin Rișcuța and Iosif Ferencz have intended to organize a symposium with a certain topic: small finds which provide valuable information for the historical knowledge. It has been successfully received since the first edition. Thus, we have decided to perpetuate the symposium.

We have intended to collect and publish the papers in a volume. It was not possible neither for the first, nor the second edition that took place in the spring of 2011. The contributions that were presented in those two editions of the symposium organized by us appeared in prestigious journals and this fact is an honour, but it also emphasizes a feeling of incompleteness. At the same time, our efforts to obtain funding opportunities have been intensified.

Our manifestation opened even more to the specialists, starting with the third edition, in April 2013. We have invited colleagues from abroad. In addition, the theme of the symposium was narrowed down to a particular subject, the costume as an expression of identity. The papers were collected in this volume, published in English, to be more accesible for a larger number of readers interested in this topic. Not all the participants gave us their contributions, which makes our volume poorer. But even so, the collection of studies that today appears in print includes a large number of valuable texts, signed by highly experienced renowned specialists and younger colleagues.

We hope that this volume to be a beginning and that the next editions of the symposium will gain in quality and dimensions. We wish that *Archaeological Small Finds and Their Significance* to become a brand of the Museum of Dacian and Roman Civilisation.

The Editors

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# PERSONAL ORNAMENTS IN THE VINČA CULTURE: THE CASE STUDY OF VITKOVO AND STRAGARI

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**Keywords:** *Vinča culture, central Balkans, osseous raw materials, Spondylus, jewellery, decorative objects, Neolithic costume.*

**Abstract:** *Personal ornaments, especially prehistoric ones, fall into the group of highly interesting finds, as they reveal aesthetic and symbolic worldview of prehistoric communities. They are also often seen as displays of identity, group or individual, and as representations of wealth, status and prestige. In this paper, ornaments from animal hard tissue will be analysed (bone, antler, teeth and mollusc shell), from Vinča culture sites in Serbia, situated in the Morava river valley (Vitkovo and Stragari). Several bone and antler*

*decorative items were discovered, as well as bracelets from Spondylus shell. The mode of wearing of these items may be reconstructed from the observed traces of use and it may also be suggested by the decorations present on the figurines found on these two sites. Most of these objects have unique shape, i. e. they do not have analogies from other Vinča culture sites and, therefore, may represent regional characteristic, or perhaps even personal taste and aesthetic preferences. Spondylus shell bracelets, on the other hand, were widespread throughout prehistoric Europe with little variations in shape, but they seem to have been in use for very long time, which suggests that their possession may have had other significance or symbolism (status and/or prestige indicators).*

## INTRODUCTION

Identity, group and individual, cultural and social, its active role in creating the societies, cultures and shaping everyday behaviour, was a topic of great interest in anthropology, ethnology and archaeology since their beginnings. Recent theoretical trends, focusing on individual and the body especially placed the identity in focus of both theoretical research as well as numerous case-studies.

Identity may be expressed in the material culture – in particular artefacts, but also in the use of a specific technology – for example, preservation of indigenous technologies vs. adoption of European technology<sup>1</sup>. The human body has been used as a tool for display and for presentation in an unlimited number of ways – through the decoration of the body (temporary or permanent), clothes, jewellery, the entire body and its decoration may be used to show and to negotiate different identities, from assertive (individual) to emblematic (group), from permanent or of long duration (such as belonging to a class or kin group) to temporary (e.g. the role of shaman or priest, participant in a ritual etc.). Through decoration, clothes, jewellery, make-up, but also through entire body posture and gesture different messages can be transmitted and an endless number of combinations was used throughout prehistory up to the modern time<sup>2</sup>. Hair, for example, was used to express individual status (single, married, young mother, widow, etc.), to signify strength and force, to denote ethnic identity, even as a

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<sup>1</sup> Cf. WAKE 1999.

<sup>2</sup> E.g. WRIGHT, GARRARD 2002; TABORIN 2004; THOMAS 2011.

visible sign of the punishment<sup>3</sup>; clothes are used even today to display not only social status or wealth, but also a current role of the individual (for example, uniforms for some professions). Jewellery and other personal ornaments, as well as different bodily decorations<sup>4</sup>, can also be combined in endless number of possibilities.

Mary Douglas, in her work *Natural Symbols*<sup>5</sup>, was among the first to articulate the symbolic significance of the body. In this work, Douglas argues that “there is a strong tendency to replicate the social situation in symbolic form by drawing richly on bodily symbols in every possible dimension”<sup>6</sup>. Given this notion that the social situation is reproduced or replicated through bodily symbols, the body is viewed metaphorically as a text that can be “read”, as a symbol or signifier of the social world that it inhabits. If the body is, as Douglas argues, a “text” upon which social meanings are inscribed, then a common vocabulary, a common symbol set, is needed to decipher those meanings<sup>7</sup>.

In the archaeological record, when often only remains of the decorations are available for study, reconstructing their symbolic value and meaning represents a challenge. In earlier literature, ornaments were often interpreted as amulets with prophylactic function, while recently the interpretations of ornaments as display of status and prestige are prevalent. For a full comprehension of prehistoric personal decorations, all of their aspects need to be carefully analysed – not just typological, but also technological aspects (raw material choice, manufacture), mode of use and contextual data.

## PERSONAL ORNAMENTS IN THE VINČA CULTURE

In the Vinča culture, bodily decorations seem to have had great importance. Anthropomorphic ceramic figurines, found in large number in all settlements, often display rich decoration – diverse clothes, jewellery, sometimes even elaborated hair styles and headgears<sup>8</sup>. Personal ornaments are found on many sites, although rarely in large number, and they were also placed in graves, as part of a funerary costume or perhaps as an offering, judging from low number of graves discovered so far<sup>9</sup>. Most of the ornaments in the Vinča culture were made from osseous raw materials<sup>10</sup>; ornaments made from stone are less common<sup>11</sup> and it seems that stone often imitated osseous materials, since mainly white stones were selected<sup>12</sup>. Rarely, stone ornaments in other colours may occur<sup>13</sup> and ceramic is also very rare. Occasionally, copper ornaments may be encountered<sup>14</sup>; however, the importance and the role of copper as raw material within Vinča culture still need to be fully assessed.

Typologically, ornaments include: 1) pendants, 2) beads, 3) bracelets, 4) rings and discs, 5) diverse applications (*appliqués*) and buckles, 6) buttons and 7) decorative pins<sup>15</sup>. Pendants were made from antler or bone and include diverse shapes: rectangular, triangular, teardrop-like<sup>16</sup>, oval<sup>17</sup> etc.; also different teeth and mollusc shells were transformed into pendants by adding a perforation<sup>18</sup>.

<sup>3</sup> FIRTH 1973.

<sup>4</sup> From tattoos to warrior paintings: cf. NORMAN 2011, p. 140–143.

<sup>5</sup> DOUGLAS 1970.

<sup>6</sup> DOUGLAS 1970, VII.

<sup>7</sup> Cf. REISCHER, KOO 2004.

<sup>8</sup> E.g. VASIĆ 1931, p. 26 and following; MILOJKOVIĆ 1990.

<sup>9</sup> Cf. MARINKOVIĆ 2010.

<sup>10</sup> Bone, antler, teeth and mollusc shell: SREJOVIĆ, JOVANOVIĆ 1959; DIMITRIJEVIĆ, TRIPKOVIĆ 2002; DIMITRIJEVIĆ, TRIPKOVIĆ 2006; VITEZOVIĆ 2007.

<sup>11</sup> Cf. SREJOVIĆ, JOVANOVIĆ 1959; BABOVIĆ 1984; ANTONOVIĆ 1992.

<sup>12</sup> Such as marble or limestone: E.g. MCPHERRON ET AL 1988.

<sup>13</sup> Cf. ANTONOVIĆ 1992, p. 17 and following.

<sup>14</sup> E.g. at necropolis on Gomolava: BRUKNER 1988.

<sup>15</sup> Cf. VITEZOVIĆ 2007, see also BONNARDIN 2008.

<sup>16</sup> E.g. Selevac: RUSSELL 1990, p. 534.

<sup>17</sup> E.g. Vinča-Belo Brdo: IGNJATOVIĆ 2008, kat. 222.

<sup>18</sup> E.g. large herbivore incisors were discovered at Slatina, Paraćin: VITEZOVIĆ 2007, red deer canines found at Selevac: RUSSELL 1990, PL. 14.8a, Cardium shells were discovered at Vinča – Belo Brdo: SREJOVIĆ, JOVANOVIĆ 1959.

Beads were made of diverse materials (stone, bone, mollusc shells) and found in following shapes: flat and rounded, conical, biconical or elongated etc.<sup>19</sup>, and natural elongated *Dentalium* shells were also used<sup>20</sup>. Bracelets were, generally, made of *Spondylus* and *Glycimeris* mollusc shells<sup>21</sup>, stone bracelets are found only exceptionally<sup>22</sup> and the same goes for the copper ones<sup>23</sup>.

Buttons were produced from mollusc shell, bone or stone and are known from Vinča-Belo Brdo<sup>24</sup>. The last two groups, applications, buckles and decorative pins were manufactured from bone and antler. They occur relatively rarely and do not have standardized forms<sup>25</sup>. *Spondylus* and *Glycimeris* were also used for making different applications and sometimes bracelets and other ornaments were remodelled after breakage into some sort applications by cutting, grinding and adding a perforation<sup>26</sup>. The mode of use and wearing of diverse ornaments may be reconstructed if the usewear traces are preserved<sup>27</sup>, but also some indirect evidence may be obtained from anthropomorphic figurines<sup>28</sup>.

However, despite their attractive nature, the decorative items are not often the subject of the analyses and publications are usually limited to catalogues and typological description. Only the rich assemblage of decorative objects from eponymous site, Vinča-Belo Brdo, was published in a short paper dealing with both bone artefacts and decorative items<sup>29</sup>. The artefacts from mollusc shell were also the topic of several papers, where the question of their origin and trade routes were explored<sup>30</sup>. However, this still does not represent the full range of Vinča culture ornaments and they need to be published in more detail. Technological data (raw material selection, techniques used for shaping) were often disregarded; also, possible modes of use and roles within the society were not sufficiently explored. The full range of possible forms of jewellery within Vinča culture, their manufacture, use and discard, as well as their circulation, meaning and value are yet to be explored.

This paper focuses on a small number of finds from two sites situated in the same region in the Morava valley, Vitkovo and Stragari, trying to explore the individual characteristics of each of them. The theoretical and methodological concepts applied are the reconstruction of the *chaîne opératoire*<sup>31</sup>, i. e. the reconstruction of the methods of manufacture (including raw material selection, techniques used, final form), use and discard for every object, and the technological<sup>32</sup> and contextual approach<sup>33</sup>, i. e. the artefacts and their characteristics are analysed within their cultural context, and the technological data are analysed in relation with other cultural phenomena<sup>34</sup>.

## VITKOVO

The site of Vitkovo is located 3 km far from Aleksandrovac, in central Serbia, SW from Kruševac, in the Morava valley. The prehistoric site is situated in the village of Vitkovo, in the Valley of Stubalska

<sup>19</sup> E.g. Vinča-Belo Brdo: SREJOVIĆ, JOVANOVIĆ 1959; ANTONOVIĆ 1992, p. 17; Botoš – Živanića Dolja: MARINKOVIĆ 2010.

<sup>20</sup> E.g. Vinča-Belo Brdo: SREJOVIĆ, JOVANOVIĆ 1959; IGNJATOVIĆ 2008, kat. 220; DIMITRIJEVIĆ ET AL 2010.

<sup>21</sup> E.g. Vinča-Belo Brdo: SREJOVIĆ, JOVANOVIĆ 1959; DIMITRIJEVIĆ, TRIPKOVIĆ 2002; DIMITRIJEVIĆ, TRIPKOVIĆ 2006; IGNJATOVIĆ 2008.

<sup>22</sup> Few are known from Vinča-Belo Brdo: ANTONOVIĆ 1992, p. 17.

<sup>23</sup> Gomolava: BRUKNER 1988, p. 26, abb. 4.

<sup>24</sup> SREJOVIĆ, JOVANOVIĆ 1959; ANTONOVIĆ 1992, p. 17.

<sup>25</sup> Antler artefact with several perforations from Selevac may belong in this group, for example: RUSSELL 1990, p. 534, fig. 14.9b.

<sup>26</sup> E.g. RUSSELL 1990, p. 535; IGNJATOVIĆ 2008, kat. 219.

<sup>27</sup> Cf. BONNARDIN 2008.

<sup>28</sup> E.g., rich necklaces and other ornaments may be seen on figurines from Vinča-Belo Brdo: IGNJATOVIĆ 2008, kat. 9, 76, 90; see also VASIĆ 1931.

<sup>29</sup> SREJOVIĆ, JOVANOVIĆ 1959.

<sup>30</sup> Cf. DIMITRIJEVIĆ, TRIPKOVIĆ 2002; DIMITRIJEVIĆ, TRIPKOVIĆ 2006; DIMITRIJEVIĆ ET AL 2010.

<sup>31</sup> Sensu LEROI-GOURHAN 1964.

<sup>32</sup> Sensu LEMONNIER 1992.

<sup>33</sup> Sensu HODDER, HUTSON 2003, p. 156–205.

<sup>34</sup> See also VITEZOVIĆ 2011c.

River, on the slopes of Vitkovo Field. It was first discovered in the mid-20<sup>th</sup> century and the first small-scale excavations were carried out in 1969 and 1971. The site of Vitkovo is famous in archaeological literature for its extraordinary terracotta figurines, including the *Lady of Aleksandrovac* and the *Venus of Župa*<sup>35</sup>. In 2001 small rescue excavations were carried out in the property of Trifunović family. Two trenches, first dimensions 5 × 5 m, later somewhat enlarged, were excavated. One pit, probably rubbish pit, was discovered, dimensions cca. 4.80 × 3.70 m, and in its vicinity daub fragments were recovered, suggesting a dwelling was situated nearby<sup>36</sup>.

The content of the pit constituted of ash and numerous portable items: pottery, terracotta figurines and altars, stone, flint and bone tools and abundant faunal remains. The material belongs to the younger phases of Vinča culture, to Vinča-Pločnik I, with some elements of the Gradac phase, and it has close connections with the material from the sites situated in the Ibar valley – Žitkovac and Fafos<sup>37</sup>.

Bone industry was relatively rich, approximately fifty items from a single feature, and included awls, heavy points, scrapers, *spatulae* etc., as well as manufacture debris<sup>38</sup>. Apart from utilitarian items, several decorative objects were found as well – an antler pendant and *Spondylus* bracelets.

The pendant was made of a fragment of the antler cortex, it has elongated, rectangular shape, a broken perforation in the upper part and below it two parallel notches were placed (Pl. I/2). Its form is perfectly regular, suggesting it was made from carefully cut cortex piece, and not from some *ad hoc* broken fragment. The entire artefact is burnished and polished, and the perforation itself, done by drilling, is smoothed from use. Notches were made by cutting with a flint tool, and are slightly smoothed from use. However, there are no traces that would suggest they were in active use, and the artefact was most likely worn suspended<sup>39</sup>.

A total number of six fragmented *Spondylus* bracelets was discovered (Pl. I/1,4–5). They were all in poor state of preservation; except for one, that was burnt, others had their surfaces eroded from unfavourable taphonomic conditions. As they were also fragmented, their original shape could not have been reconstructed (i. e. open or close bracelets). This form, however, does not differ from other finds from central Balkans or other sites in Neolithic/Aeneolithic sites in Europe<sup>40</sup>.

Several points make this Vitkovo find very interesting: first, in one single pit six specimens were discovered, which is relatively rich find, and second, the presence of *Spondylus* outside immediate Danube area is often ignored<sup>41</sup>, although the presence of *Spondylus* is long known on Divostin<sup>42</sup> and recently also on Drenovac<sup>43</sup>. Furthermore, the problem of their context raises interesting questions. The pit in which they were discovered was interpreted as rubbish pit and most of its content confirms this hypothesis<sup>44</sup>. This would, therefore, mean that they were discarded – their fragmented state, traces of burning on one of them etc., suggest they were no longer usable. Sometimes *Spondylus* ornaments are repaired, but these from Vitkovo (some episodes of repair are possible, although cannot be confirmed from their poor state of preservation) had reached the end of their life and were simply thrown away.

*Spondylus* finds are often associated in archaeological reports with wealth and prestige<sup>45</sup>. This concept, however, appears inadequate to explain the deep interest that prehistoric communities

<sup>35</sup> TOMIĆ 1988.

<sup>36</sup> ČAĐENOVIC ET AL 2003; ČAĐENOVIC 2007.

<sup>37</sup> TOMIĆ 1988; ČAĐENOVIC ET AL 2003; ČAĐENOVIC 2007.

<sup>38</sup> VITEZOVIĆ 2011a.

<sup>39</sup> Cf. BONNARDIN 2008.

<sup>40</sup> E.g. COMŞA 1973, TODOROVA 2002, AVRAMOVA 2002; see also BORELLO, MICHELI 2004, SIKLÓSI 2004, IFANTIDIS, NIKOLAIDOU EDS. 2011, SÉFÉRIADÈS 2010.

<sup>41</sup> Cf. maps in WILLMS 1985; DIMITRIJEVIĆ; TRIPKOVIĆ 2002; DIMITRIJEVIĆ, TRIPKOVIĆ 2006; TODOROVA 2002, SÉFÉRIADÈS 2010.

<sup>42</sup> MCPHERRON ET AL 1988.

<sup>43</sup> VITEZOVIĆ 2007.

<sup>44</sup> Bone tool assemblage included broken tools and manufacture debris: VITEZOVIĆ 2011b, faunal remains also suggest it was a rubbish pit – BULATOVIĆ 2011.

<sup>45</sup> SIKLÓSI 2004, see also SÉFÉRIADÈS 2010, p. 186.

had in *Spondylus*, the large geographical distribution of the finds, as already noted by M. Séfériadès, who offered explanation within the realm of beliefs and possible relation with shamanism<sup>46</sup>. The meaning and value of marine shell ornaments was not restricted to wealth, status and/or prestige (although they are not excluded); however, to gain better understanding, their life histories need to be reconstructed in more detail – modes of use (on clothes? as jewellery? or they were not worn at all, but kept instead?), sequences of repair and modes of discard. We already saw that they may be deposited in graves<sup>47</sup>, they may be simply lost/forgotten and became a part of archaeological record somewhere within the settlement, but also, as the Vitkovo find shows, may be thrown away in a rubbish pit. Finally, the distribution of *Spondylus* items is far more complex than it may be concluded by the current state of research, which means that the reconstructed routes of trade and exchange also need to be revised.

As already mentioned, figurines from Vitkovo are known for their rich decoration. On the famous *Lady of Aleksandrovac* (fig. 5) headgear, clothes and decorations on the face (make-up or a mask) were presented in detail, as well as her jewellery – she has a necklace with a small pendant and, also, at least two incision on her arms (near the hands) that can be interpreted as bracelets. Another figurine from Vitkovo is a necklace with large oval pendant<sup>48</sup>.

## STRAGARI

The site of Stragari-Šljivik is situated in the vicinity of the town of Trstenik, West from Kruševac, in the Morava valley. The prehistoric site was situated on a gentle slope surrounded by the Riljačka River, at the entrance of the modern village of Stragari. In the period between 1986 and 1988 the site was excavated in several campaigns; the total excavated surface was approx. 170 m<sup>2</sup><sup>49</sup>. Two horizons were identified with certainty, belonging to phases Vinča-Turdaş I and II, but there is a possibility for another occupational phase<sup>50</sup>. Five houses were excavated, and rich portable material was discovered – ceramic vessels, lids, altars and figurines, flint and stone tools<sup>51</sup>.

Bone assemblage consisted of diverse tools, awls, fine and heavy points, *spatulae*, scrapers, as well as heavy tools made from antler, hammers, punches etc.<sup>52</sup>.

The assemblage also contained several decorative items. One pendant was found (fig. 7), made from a segment of a larger long bone. It is in the shape of an elongated rectangular, with perforation on one end and it is somewhat thicker on the opposite end. It is completely preserved, with traces of burnishing. Lateral sides of the perforation are worn out, suggesting this object was not worn suspended, but was sawn instead, probably on clothes. Its dorsal surface, also, shows traces of intense polish and is much more worn than the outer, ventral side, confirming such an interpretation of its use<sup>53</sup>.

Three elongated, thin artefacts were discovered, which may serve as some sort of spindle, but could also have been used as decorative pins (Pl. II/3,5). They were all made from large long bone segments (one from red deer metapodial, others also from large herbivore bones) and have thin, highly polished bodies and decorated heads. One is especially carefully made, with head that resembles an animal head – it has two horn- or antler-like additions (Pl. II/3). It is completely preserved and it was shaped by cutting and scraping with a flint tool and afterwards polished with some fine-grained abrasive means (such as sandstone).

<sup>46</sup> SÉFÉRIADÈS 2010, p. 186–7.

<sup>47</sup> E.g. Sultana-Malu-Roşu: BELDIMAN ET AL 2008; Durankulak: TODOROVA 2002; AVRAMOVA 2002; Botoş-Živanića Dolja: MARINKOVIĆ 2010, to mention just a few; see also SÉFÉRIADÈS 2010.

<sup>48</sup> Fig. 6, cf. also MLADENović 2005.

<sup>49</sup> STANKOVIĆ 1988a, p. 3, STANKOVIĆ 1989.

<sup>50</sup> STANKOVIĆ 1988a, p. 5, 6, STANKOVIĆ 1988b, p. 95 and following.

<sup>51</sup> STANKOVIĆ 1988a; STANKOVIĆ 1989.

<sup>52</sup> VITEZOVIĆ 2009; VITEZOVIĆ 2011b.

<sup>53</sup> Cf. BONNARDIN 2008.

The other two objects are not so elaborated in shape, one has rounded head, the other is fragmented, but they all have in common a careful manufacture and high polish (Pl. II/5). Traces of polishing with some fine-grained abrasive means may also be observed on them.

All these artefacts have slightly pointed distal ends, however, the points were not sharp and have no traces of use. Instead, all objects have intense traces of use that cover their entire surfaces – polish, shine and dense, but very fine irregular lines and striations, from long contact with soft materials<sup>54</sup>, suggesting they may have been used as decorative pins for clothing.

One highly polished small antler tine was used as decoration as well<sup>55</sup>. Its basal part is not preserved and the most of its outer surfaces were smoothed and polished (traces of some fine-grained means may be observed). Traces of use were not present. Perhaps it was used as some sort of buckle or clasp pin, used on clothes.

Finally, the find of one unmodified bear tooth should be mentioned. Although it has no traces of modification, its solitary presence suggests it was brought into the settlement with a purpose – either it was worn/carried without modifications, or it was left to be shaped into a pendant later.

Contextual data for these finds could not have been reconstructed from the field documentation; they were found in close relations to the dwellings, but it is not clear whether they were actually discovered within them or not. The fact that most of them are completely preserved suggests they were not thrown away, but may have been still in use when the dwellings were abandoned or were simply lost and thus subsequently entered the archaeological record.

On the decoration of Stragari figurines, clothes were specially emphasized, but some representations of jewellery are also present<sup>56</sup>. Especially one figurine with a belt and large oval decorations on it should be outlined (Pl. II/2).

## DISCUSSION

The relatively low number of decorative items found on Vinča culture sites suggests they were carefully guarded and were not abandoned or discarded easily – the much larger number of them that once existed may be suggested by finds from rare graves<sup>57</sup> and by rich decoration on figurines. Their long use is visible from intense usewear traces and suggests they had great value.

Their mode of use may be reconstructed from the figurine decorations and from traces of use – perforated items, usually interpreted as pendants, may have actually been worn as necklace pieces, but they could also have been attached or sewn to clothes (as appliqués).

As a technological characteristic of decorative items, it may be noted that, even when their forms are simple, there was a great investment of time and skill in their manufacture – they are all carefully shaped and their surfaces polished in detail. Careful planning may also be suggested from the very choice of raw materials and their preparation – antler pendant from Vitkovo was most likely made from cut-out segment, not some accidentally broken piece, while Stragari pins were all made from the uniform raw material, and by same manufacturing techniques. Sometimes, their very shape represents a skilful craftsman, as in case of a decorative pin from Stragari with zoomorphic head. The skill itself, invested in the making of an object, may have been valued<sup>58</sup> and, perhaps, carefully made artefacts were used to bring and/or display the status and prestige of the maker and/or person that wore them.

Regarding shapes and forms, it may be observed that pieces made from locally available raw materials (antler, bone, teeth) have great variety in shapes, practically two identical pieces have not been found. Contrary to this, artefacts from exotic materials, such as *Spondylus* bracelets, are uniform

<sup>54</sup> Cf. LEGRAND 2007.

<sup>55</sup> VITEZOVIĆ 2009, p. 145.

<sup>56</sup> Cf. STANKOVIĆ 1988a.

<sup>57</sup> For example, Botoš-Živanića Dolja: MARINKOVIĆ 2010.

<sup>58</sup> Cf. SINCLAIR 1995.

in their shape, and were, most likely, imported as finished objects. Artefacts from locally available material were, therefore, most likely made by local craftspeople, and may have served as a display of local status and/or prestige, either craftspeople or those that wore them (or both). They might also reveal some regional, perhaps even personal, aesthetic preferences.

*Spondylus* items, probably, represented (or were used to negotiate) prestigious status of their owner, but any additional meaning, as the one suggested by M. Séfériadès<sup>59</sup> could not have been deduced from these finds. However, it seems that after breakage they lost their value and were simply discarded.

Further studies in Vinča culture jewellery will perhaps enable tracing regional and individual differences and similarities and, also, possible chronology.

Among the material published so far from central Balkans, the pin with zoomorphic head from Stragari has no analogies.

Animals had a certain symbolic meaning and value within the Vinča culture, as may be observed from numerous zoomorphic figurines and vessels with zoomorphic traits or decorations (especially the Vinča culture characteristic prosopomorphic lids should be outlined). Animals with horns and/or antlers were most often represented<sup>60</sup>, so the pin with zoomorphic head is not an exception by the representation, but by the raw material. Furthermore, the very choice of raw materials of animal origin as preferred raw material for personal ornaments also suggests that their origin had importance and symbolic meaning. Furthermore, sometimes exotic raw materials (i. e. of distant origin) were especially valued, such as mollusc shells, but those raw materials originating from outside of the settlement were also chosen very often, such as antlers or teeth from wild game (antler pendant from Vitkovo and the unworked tooth from Stragari). Perhaps some of the meanings and symbolism of certain ornaments, therefore, may be searched in the wild vs. domestic oppositions<sup>61</sup>.

The white colour and the shiny appearance may also have had some importance and meanings, as may be concluded from imitations made in white stones<sup>62</sup>.

The full range of possible forms of jewellery within Vinča culture, their manufacture, use and discard, as well as their circulation, meaning and value, are yet to be explored.

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<sup>59</sup> SÉFÉRIADÈS 2010, see above.

<sup>60</sup> Cf. MILOJKOVIĆ 1990, p. 416–7; IGNJATOVIĆ 2008.

<sup>61</sup> SENSU HODDER 1990.

<sup>62</sup> See above; cf. also LUIK 2007; VITEZOVIĆ 2012.

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**Pl. I.** 1. Spondylus bracelets Vtk 48, 44, 43 (Vitkovo). Drawing J. Kotlajić; 2. Antler pendant Vtk 14 (Vitkovo). Drawing A. Kapuran, photo S. Vitezović; 3. *Lady of Aleksandrovac* (Vitkovo). Photo archive Museum of Župa, Aleksandrovac; 4. Spondylus bracelets Vtk 43, 44, 45 (Vitkovo). Photo S. Vitezović; 5. Spondylus bracelets Vtk 46, 47, 48 (Vitkovo). Photo S. Vitezović.



**Pl. II.** 1. Figurine from Vitkovo, after MLADENović 2005; 2. Figurine from Stragari, after STANKOVIĆ 1988a, STANKOVIĆ 1988b Matice Srpske, Novi Sad; 3. Bone pin with zoomorphic head St 56 (Stragari). Photo archive National Museum, Kruševac; 4. Bone pendant St 53 (Stragari). Photo archive National Museum, Kruševac; 5. Bone pin with oval head St 37 (Stragari). Photo archive National Museum, Kruševac.

# AENEOLITHIC NECKLACE MADE OF SHELL BEADS DISCOVERED AT ARIUȘD, COVASNA COUNTY

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**Keywords:** Aeneolithic, Ariușd, necklace, ritual pit, shell beads.

**Abstract:** The article presents the discovery of a shell necklace from Ariușd – “Tyiszk”, Covasna County. It was recovered during 1971 excavation campaign in the ritual pit no. 2. It is made of 256 discoid shell beads and it is long of 55 cm. The beads have quite similar morphological and morphometrical parameters like: the circular or

oval general shape; the smooth edges or with slightly irregular outline; the convex-concave profile (anatomical morphology); about 12–15 mm diameter and 2–3 mm thickness; in most of the cases, the perforation is placed in center of the piece and its shape is circular or oval, having 2–4 mm in diameter. According to Beldiman Typological List 2007, the beads are considered discs made of shell, type III E4. This type of adornment is especially found in ritual or funerary contexts.

## OBJECTIVES AND METHODOLOGY

Adornments represent an important chrono-cultural marker within archaeological discoveries. The raw materials which they were made of, the technical procedures applied in order to obtain them or their use highlight aspects related to the symbolic behavior of the people from the past.

This article presents the results of the analysis of a necklace comprising 256 shell beads discovered in 1971 in the well-known site of Ariușd – “Tyiszk”, Covasna County.

The artefacts were analyzed according to the methodology recently applied in two PhD theses and in several articles and studies<sup>1</sup>. It takes into account the following steps: typological analysis of the pieces according to the typological list elaborated for the Prehistoric osseous materials industry discovered in Romania – Beldiman 2007 Typological List<sup>2</sup>, description of the morphologic and gathering the morphometrical parameters, macro- and microscopic analysis of the traces generated during the manufacturing chain in order to establish the technical procedures applied, analysis of use-wear traces in order to formulate the functional hypotheses.

In this context, we have to highlight the importance of using systematic microscopic analysis of the surfaces in order to identify the manufacturing and use-wear traces.

<sup>1</sup> BELDIMAN 2007 – with bibliography; BELDIMAN, SZTANCS 2005; SZTANCS 2011a; SZTANCS 2011b; SZTANCS 2012; SZTANCS, BELDIMAN 2005; SZTANCS, BELDIMAN 2010; SZTANCS ET AL 2010.

<sup>2</sup> BELDIMAN 2007, p. 72–76.

Due to the large number of pieces which the necklace contains and to the fact that this type of artefacts is a special one, it should be treated accordingly. In this point of analysis, the necklace was introduced in the database of Neo-Aeneolithic osseous materials industry from Transylvania and in our statistics the necklace appears as a whole, not as 256 different entities<sup>3</sup>.

## CONTEXT OF DISCOVERY

The archaeological site Ariuşd – “Tyiszk” (Tyiszk Hill) belongs to the well-known Aeneolithic cultural complex with Ariuşd-Cucuteni-Tripoljje painted ceramics. It represents a settlement fortified with ditches and walls, placed on a plateau in the North-Western side of Ariuşd village (Erősd), Vâlcele commune, Covasna County. The settlement is placed at 300 m North-West of Ariuşd village, on an elongation of Tyiszk Hill, near the river with the same name<sup>4</sup>.

The site was mentioned for the first time by Orbán Balázs in 1869. In 1895, the primary teacher A. Benkő donated to the National Székely Museum of Sfântu Gheorghe/Sepsiszentgyörgy the first artefacts discovered in this site. At the beginning of the 20<sup>th</sup> century (1905, 1906), the archaeologist Gy. Teutsch and the Reformed priest of the village made excavations there under the jurisdiction of the Archaeological Department of “Bethlen Gábor” College of Aiud<sup>5</sup>.

The extensive archaeological research of the site began in 1907, being led by László Ferencz, the director of the National Székely Museum of Sfântu Gheorghe/Sepsiszentgyörgy. During 1907–1913 he researched the area and estimated that the settlement was placed on a 5400 m<sup>2</sup> surface<sup>6</sup>.

The results of the excavations were rapidly presented and published, arousing the interest of specialists both from Transylvania and Europe. Consequently, several archaeologists visited, at that time, the site of Ariuşd – “Tyiszk”. László Ferencz was highly aware of the importance of the interdisciplinary research in archaeology and he paid attention to this type of approach in order to valorise in a complex manner his discoveries. Unfortunately, his efforts for writing the site monograph were not materialized.

One of the most important discoveries of László Ferencz is the hoard with prestige objects recovered in 1910 in the 4<sup>th</sup> level<sup>7</sup>. According to the data published by Vladimir Dumitrescu, the hoard is dated from Ariuşd-Cucuteni-Tripoljje, phase A-B<sup>8</sup>. Regarding the stratigraphy of the discovery, László Ferencz mentioned a small surface of 1 m<sup>2</sup> (between the V–VII longitudinal ditches and 7–8 latitudinal ones) in which at the depth of 0.75–1.50 m, two ceramic pots, almost entire, contained various artefacts<sup>9</sup>. In the article published in 1911, the author of the excavations mentioned the discovery of a “collection of adornments” comprising pieces made of stone, copper, bone, red deer antler and animal teeth. The objects were put in a pot covered with a lid<sup>10</sup>.

Roska Márton included all the pieces of the hoard in the *Catalogue of Prehistoric discoveries from Transylvania*<sup>11</sup>. During the Second World War, an important part of the artefacts included in the Ariuşd hoard was lost. Consequently, only a part of the pieces that László Ferencz mentioned in 1911 and included in Roska’s catalogue in 1942, are nowadays stored at the National Székely Museum of Sfântu Gheorghe/Sepsiszentgyörgy.

In 1968, Ion Nestor, Eugenia Zaharia (Institute of Archaeology of Bucharest), Székely Zoltán (Covasna County Museum of Sfântu Gheorghe/Sepsiszentgyörgy) and Doina Galbenu (National Museum of Romanian History of Bucharest) began new excavations in the site. With that occasion,

<sup>3</sup> SZTANCS 2011a; SZTANCS 2011b.

<sup>4</sup> LÁSZLÓ 1911; SZTÁNCUSJ 2005; CAVRUC 1998, p. 152.

<sup>5</sup> LÁSZLÓ 1911, p. 389.

<sup>6</sup> LÁSZLÓ 1911, p. 389.

<sup>7</sup> SZTÁNCUSJ 2005, p. 85.

<sup>8</sup> BELDIMAN, SZTANCS 2009, p. 140.

<sup>9</sup> SZTÁNCUSJ 2005, p. 89; SZTÁNCUSJ 2009.

<sup>10</sup> LÁSZLÓ 1911, p. 222, 224; SZTÁNCUSJ 2005, p. 86.

<sup>11</sup> ROSKA 1942, p. 77, fig. 93/2.

they observed that the Aeneolithic habitation of the site is denser in the Northern side of the settlement: 3.50 m thickness and 11 levels<sup>12</sup>.

In the North-Eastern area, the settlement was fortified with a ditch and in the Northern area, two longitudinal, parallel walls of fortification were identified. These date from the Ariușd I phase and they were strengthened with a palisade<sup>13</sup>. During the excavations campaigns, several huts with rich inventories, numerous pits and kilns were discovered.

The stratigraphy of the settlement comprises levels dated from Ariușd-Cucuteni-Tripoljje cultural complex (Cucuteni A stage) and a level dated from Schneckenberg, B stage<sup>14</sup>.

During the excavations from 1971, in the Northern part of the site, a ritual pit (no. 2) with human remains was discovered. This archaeological complex belongs to the second level or to an undetermined superior one. In plan, the pit has a quite circular shape. In profile, the pit is cylindrical with slightly convex bottom placed at 2.60 meters above the actual level of the soil. The pit's depth, probably, was around 1.70–1.80 meters. On its bottom there was a layer of cinder, a flint arrowhead, animal bones, small pieces of ceramics and human skeletal remains probably from four individuals. The first group of human remains belongs to a crouched child of 3–4 years old, having bones in anatomical connection; the second group is represented by the long bones of a teenager of 13–15 years old. There are another two groups of disparate bones (without anatomical connection) coming from two adults (Pl. I/1).

At the base of the superior (cylindrical) sector of the pit it was discovered a thick deposit of burnt river shells (*Unio Sp.*). Above this, there was a layer of burnt ceramic fragments, thick of 10–12 cm. In the Western part, an un-burnt bottom of a ceramic pot was put upside down. Around it, a necklace made of *Unio* shell discs was discovered. The necklace was not burnt, but two discs of the same type with traces of burning were discovered on the layer of ceramic fragments (pl. I/1–2; pl. II–IV).

Besides these discoveries, in the settlement there were mentioned some osteological remains of *Ursus arctos*, *Cervus elaphus*, *Capreolus capreolus*, *Sus scrofa ferus* and *Castor fiber*<sup>15</sup>.

### ANALYSIS OF THE NECKLACE MADE OF *UNIO* SHELLS BEADS

Identification number: ARS C 1 – 256

Type: III E4

Collection: National Székely Museum of Sfântu Gheorghe/Sepsiszentgyörgy

No – inventory number (C1 – C256)

The necklace is made of 256 discoid *Unio* shell beads. The necklace is now long of 55 cm. The beads have quite similar morphological and morphometrical parameters like: the circular or oval general shape; the smooth edges or with slightly irregular outline; the convex-concave profile (anatomical morphology); the diameter which is about 12–15 mm and the thickness of 2–3 mm; in most of the cases, the perforation is placed in centre of the piece and its shape is circular or oval, having a diameter between 2–4 mm<sup>16</sup>. According to Beldiman Typological List 2007, the beads are considered discoid beads made of shell, type III E4.

The surfaces of the beads are anatomical and frequently they have the layers of nacre exfoliated. On 2/3 of the circumference, the edges have a smooth or slightly irregular morphology which might have been the result of shaping (percussion or pressure followed by the abrasion for obtaining the general circular or oval shape) and the use wear polish (by the contact with a textile or leather surface – clothes). The third part of the circumference presents intense traces of functional polishing which are due to a long time use as necklace<sup>17</sup> (pl. I/2; pl. II–IV).

<sup>12</sup> ZAHARIA, SZÉKELY 1988; CAVRUC 1998, p. 152.

<sup>13</sup> CAVRUC 1998, p. 152–153.

<sup>14</sup> ZAHARIA 1994, p. 110; SZTÁNC SUJ 2007, p. 187.

<sup>15</sup> ZAHARIA, SZÉKELY 1988; COMȘA 1996, p. 157.

<sup>16</sup> SZTANCS, BELDIMAN 2011a, p. 37.

<sup>17</sup> SZTANCS, BELDIMAN 2011b, p. 130; SZTANCS 2012.

The manufacturing chain of these shell beads may include the following stages:

*Débitage.* A fragment of shell was obtained probably by direct or indirect percussion.

*Shaping.* 1. The shell was perforated starting from the concave surface of the blank using a bow drill and it was finished on the superior surface. 2. The edges were shaped using direct or indirect percussion in order to obtain the slightly circular or oval outline of the bead. 3. The edges were abraded.

*The use-wear traces* identified consist in intense functional abrasion localised around the third part of the circumference. This could indicate a long period of wearing the necklace (maybe during more generations; the inheritance of the object).

## ANALOGIES

Discs made of *Unio* shells were also found in the hoard of Ariuşd. In the article published in 1911, László Ferencz mentioned 42 *Unio* shell beads<sup>18</sup>, but in the collection of National Székely Museum of Sfântu Gheorghe/Sepsiszentgyörgy, only 5 of them are preserved (fractured in Prehistory and restored). The five discs made of *Unio* shells (III E4) are similar to those from the necklace discovered in 1971. These were shaped using the procedure of indirect percussion in order to extract fragments of shell with standardised dimensions (about 25/25 mm). The perforation was done by indirect percussion and rotation. After that, in order to obtain smooth edges, the abrasion was applied using a fixed support (a sandstone slab). The use-wear traces are the fractures of the perforations and the intense bluntness of the edges.

Similar pieces were discovered in the graves from the necropolis of Decea Mureşului<sup>19</sup>; important discoveries come from Ukraine<sup>20</sup> and Hungary<sup>21</sup>. The shell discs were fixed in compound adornments such as: necklaces, bracelets or belts.

## CONCLUSIONS

The discs made of freshwater shells were found preponderantly in graves, this fact supplying evidence for the idea that these were probably related to a cult of regeneration. The ones that were discovered at Ariuşd as well as the ones discovered at Decea Mureşului were meant to accompany the deceased into an unknown journey, with the hope of rebirth.

Large quantities of freshwater shells and adornments made of these objects were also identified in graves dated from the same period in other parts of the Carpathian Basin. The recent publication of the necropolis of Budakalász presents large quantities of worked shells recovered from the graves of inhumation dated from the Late Copper Age<sup>22</sup>.

In the Aeneolithic freshwater shellfish were frequently used as foods. People used to gather them and after their consumption, the shells were transformed into tools or adornments. On the other side, the symbolic behaviour related to shells could be interpreted in terms of regeneration, the spiritual meaning of the shell being closely related to this idea.

## ACKNOWLEDGEMENTS

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<sup>18</sup> LÁSZLÓ 1911, p. 258, fig. 95.

<sup>19</sup> KOVÁCS 1933, p. 89–101.

<sup>20</sup> KOTOVA 2010; SZTANCS 2012.

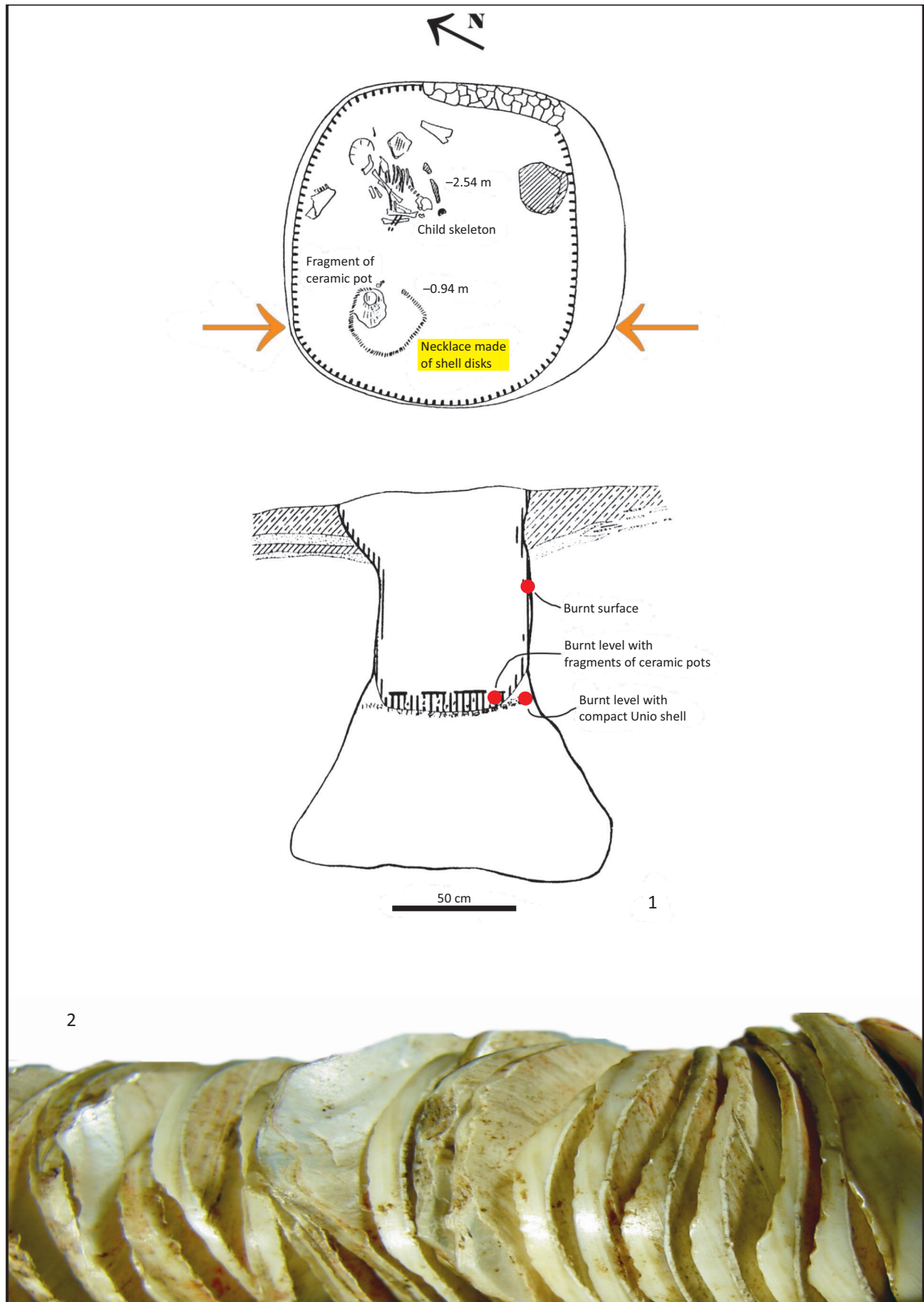
<sup>21</sup> BONDÁR, RACZKY 2010; SÜMEGI 2010.

<sup>22</sup> SÜMEGI 2010, pl. CXLVII.

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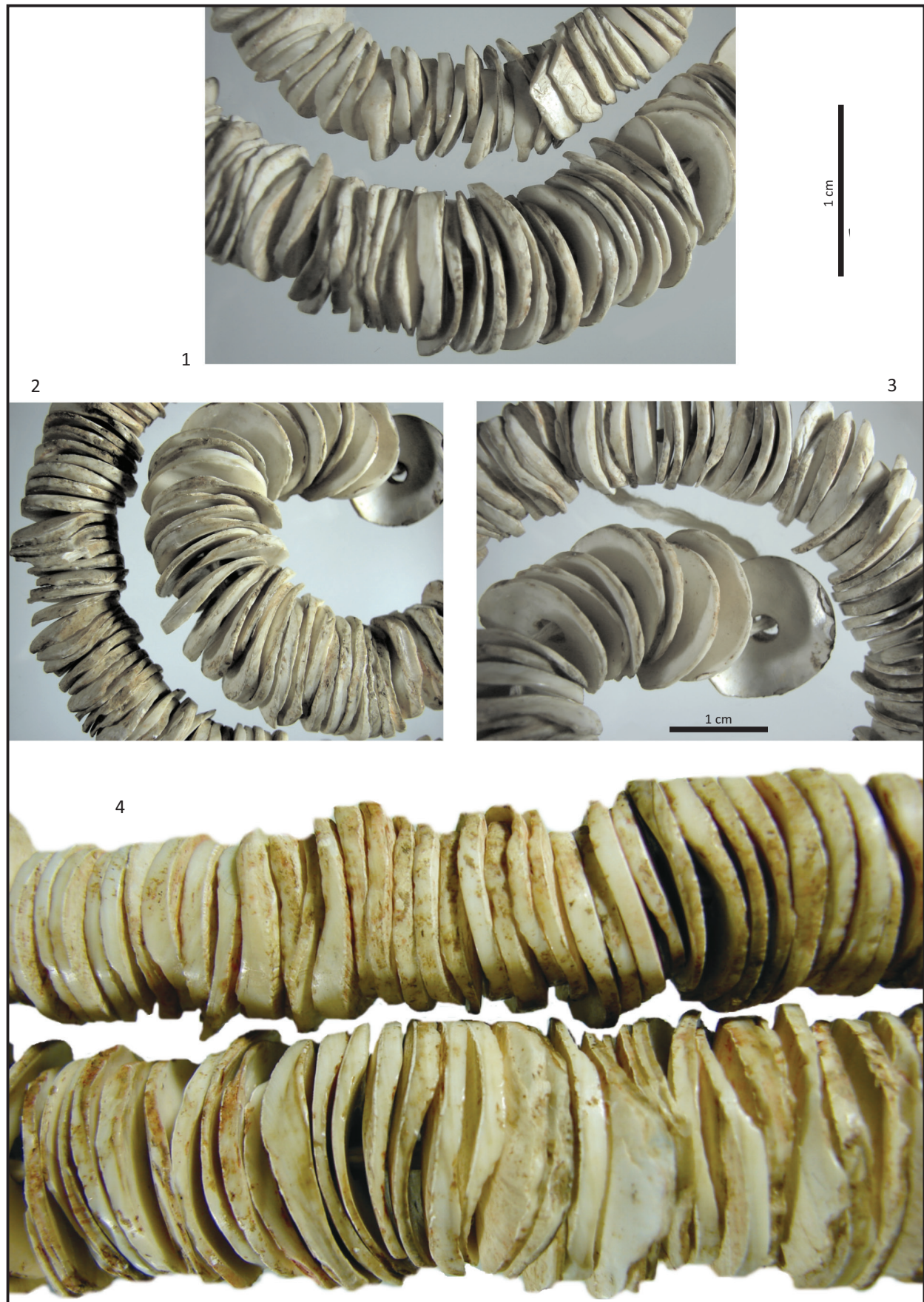
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**Pl. I. 1.** Ariuşd – “Tyiszk”. Pit 2/1971, plan and section. After ZAHARIA, SZÉKELY 1988. **2.** Necklace made of shell beads – detail. Photo Corneliu Beldiman.



**Pl. II.** Ariuşd – “Tyiszak”. Necklace made of shell beads – general view and details. Photo Corneliu Beldiman.



**Pl. III.** 1–4. Ariuşd – “Tyiszk”. Necklace made of shell beads – details. Photo Corneliu Beldiman.



Pl. IV. 1–6. Ariușd – “Tyiszk”. Necklace made of shell beads – details. Photo Corneliu Beldiman.

# STONE PENDANTS FROM COȚOFENI CULTURE

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**Keywords:** *adornments, Coțofeni, pendants, workshops.*

**Abstract:** *The article presents the stone pendants used as adornments in the Coțofeni communities. The context of manufacturing of the artefacts, their typology, the raw materials used for this purpose, workshops and raw materials*

*sources, wearing, chronology etc. are the main aspects approached in this article. Most of the pieces belong to the final phase of the culture (Coțofeni III). Only few of them were recovered from Coțofeni II contexts, some of them only from caves deposits.*

## INTRODUCTION

Taking into account the large area of habitation and the high number of known settlements, the adornments used by the members of the Coțofeni communities are not very well known<sup>1</sup>. On the other side, the aspects regarding the ways of wearing these adornments, their typology, the sources of raw materials, the manufacturing centres, the trades etc. are not fully established. This is the main reason we have chosen to deal with a special category of adornments, which can be considered representative for Coțofeni culture: the stone pendants.

The lack of a special approach of the subject, as well as the discovery of some important pieces in the site of Cetea-Picuiata, which could clarify certain aspects regarding the local manufacture of these objects, determined us to approach the subject from the perspective of all known discoveries.

## THE CATALOGUE OF COȚOFENI STONE PENDANTS

**1. Ampoița-La Pietre** (Alba County). Within the levels dated from Coțofeni culture, several pendants made of sandstone (some of them unfinished) were discovered. This could suggest the existence of a specialised workshop in this area. Another pendant made of sandstone, having an oval shape, perforated in the upper part was also discovered there and connected with the Coțofeni habitation of the site. Bibl.: CIUGUDEAN, GLIGOR 2003, p. 40; SOBARU, ANDREI 2005, p. 36, pl. VI/1.

**2. Băile Herculane-Peștera Hoților** (Caraș-Severin County). Two trapezoidal pieces made of marble were recovered from the 1<sup>st</sup>–7<sup>th</sup> levels. They were perforated in the upper part. Bibl.: ROMAN 1976, p. 18, pl. 52/32–33; ROMAN 1977, pl. 39/17; CIUGUDEAN 2000, p. 31, pl. 132/10–11; ROMAN 2010, p. 26, fig. 57/15–16; PETRESCU 2000, p. 62, pl. CIV/7–8.

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<sup>1</sup> From the large literature mentioning Coțofeni adornments, including numerous studies, we will refer only to the syntheses appeared in the past decades: ROMAN 1976, p. 17–18; CIUGUDEAN 2000, p. 29, 31–32, 36–38; BELDIMAN ET AL 2006, p. 9–28.

**3. Băile Herculane-Peștera Oilor** (Caraș-Severin County). From this area, an elongated pendant made of micaceous sandstone was discovered. It has rounded corners and the conical end perforated. Bibl.: PETRESCU, POPESCU 1990, p. 64, pl. XI/4; PETRESCU 2000, p. 62; pl. CVIII/4; CIUGUDEAN 2000, p. 31, pl. 132/1.

**4. Cerișor-Peștera no. 1** (Hunedoara County). A marble trapezoidal pendant, with convex edges and rounded corners was recovered from the Coțofeni habitation. The piece is drilled in the upper middle part. Both, the edges and the sides of the piece were shaped by abrasion, using a hard material (sandstone) as support. Bibl.: ROMAN ET AL 2000, p. 12, pl. IX/1; BELDIMAN, SZTANCS 2005a, p. 50–51, 57, 59, 68, tables 1–2, fig. 1; 3/3–4; 10–12; ROMAN 2008, p. 113, fig. LXI/6.

**5. Cetea-Picuiata** (Alba County). Four pendants made of sandstone were discovered while researching the area with ritual deposits. Only one of them is finished. Two pieces are not perforated and one presents a beginning of a perforation. The discoveries have not been published, yet.

**6. Gârliște-Peștera Galaț** (Caraș-Severin County). A fragmentary white stone piece, with a perforation, from Coțofeni area, was discovered. It could be a pendant. Bibl.: ROGOZEA 1986, pl. IX/3.

**7. Peștera-Igrița Peștera** (Bihor County). In the inventory of a child inhumation grave (grave A), it was found a pendant made of limestone. The pendant was in good shape, polished, with the lower part being “shallow-tail”-shaped. The piece is considered an amulet. Bibl.: EMŐDI 1984, p. 406, fig. 4/11; POPA 2004, p. 122–124, pl. IV/8b.

**8. Poiana Ampoiului-Piatra Corbului** (Alba County). Five finished pendants made of sandstone and other two being, in various stages of manufacture, were discovered. They were not perforated and they offer clues regarding the hypothesis of the existence of a workshop in that area. Bibl.: REPARHALBA 1995, p. 149; CIUGUDEAN 2000, p. 31, pl. 132/2–6, 8–9.

**9. Rabicha-Magurata Cave** (Bulgaria). A squared marble pendant was discovered, in the area of Coțofeni habitation. It has rounded corners and polished convex sides, with a perforation in the central area. Bibl.: DŽAMBAZOV, KATINČAROV 1974, fig. 9; ALEXANDROV 1990, p. 40, pl. 45/5.

**10. Tureni-Rotogol** (Cluj County). A stone pendant was discovered there, accidentally, and it could belong to Coțofeni culture. Bibl.: LAZAROVICI, KALMAR 1985–1986, p. 733.

## ANALYSIS OF THE DISCOVERIES

### I. Contexts

Most of the stone pendants from Coțofeni culture were recovered from cultural layers, thus, from household contexts (Ampoița, Băile Herculane-Peștera Hoților and Peștera Oilor, Cerișor, Gârliște, Poiana Ampoiului, Rabicha). There is a single funerary context, in *Peștera Igrița*, where the limestone pendant was recovered from the funerary inventory of a child's grave<sup>2</sup>. Discoveries from *Cetea-Picuiata* offer an uncertain context. The four pendants (three in various stages of manufacture and a finished one) were recovered from Coțofeni III depositions. Within them, materials coming from the neighbouring habitation were mixed. This fact makes difficult the certain delimitation between the intentional depositions and the ones that got accidentally there<sup>3</sup>. A single piece was discovered during a field survey – the one from *Tureni-Rotogol*.

### II. Typology

The Coțofeni stone pendants can be included in various types, but most of them have basic shapes (almond-like and trapezoidal pendants). These are similar and they are spread widely in the cultural area. The other discoveries represent isolated types (fig. 5).

<sup>2</sup> The grave was dated from Baden culture (EMŐDI 1984, p. 406, fig. 4/11). In our opinion, the funerary discovery should be dated from the 3<sup>rd</sup> phase of the Coțofeni culture (POPA 2004, p. 122–124, pl. IV/8b).

<sup>3</sup> POPA ET AL 2004, p. 183.

**Type A. Almond-like pendants**

They were discovered at Poiana Ampoiului-Piatra Corbului (fig. 1/1–2, 4, 8, 10, 15–16), Ampoița-La Pietre (fig. 1/3), Băile Herculane-Peștera Oilor (fig. 1/9) and Cetea-Picuiata (fig. 1/11, 13 = 2/1, 3). Two pieces were discovered at Poiana Ampoiului-Piatra Corbului (fig. 1/15–16) and Cetea-Picuiata (fig. 1/13 = 2/3). They were shaped, but were not perforated.

**Type B. Trapezoidal-shaped pendants**

These were recovered from the archaeological excavations from Băile Herculane-Peștera Hoților (fig. 1/6–7), Cerișor-Peștera no. 1 (fig. 1/5 = 2/6) and Cetea-Picuiata. Two unfinished pieces, made of sandstone, were discovered there (fig. 1/12, 14 = 2/2, 4).

**Type C. Square-shaped pendants**

There is a unique piece, with rounded corners, discovered at Magurata Cave from Rabicha (Bulgaria) (fig. 1/19).

**Type D. Pendants shaped like an arrow without head**

The piece discovered at Peștera Igrița can be included here. It has curved edges, the superior part is straight, and the opposite side is shallow-tail-shaped (fig. 1/18).

**III. Raw materials, “workshops” and technical procedures**

The raw materials, used in order to create these adornments, are various: sandstone, marble, limestone. The selection of the stone was, probably, determined by several reasons, which are difficult to identify for each piece. The criteria are: the source available for this, the symbol of the stone and the aesthetic aspect of the finished piece.

*Pendants made of sandstone* (fig. 1/1–4, 8, 10–16; 2/1–4). The pendants made of sandstone are the most frequent (at least 15 pieces<sup>4</sup>). These were discovered at Ampoița-La Pietre<sup>5</sup>, Băile Herculane-Peștera Oilor<sup>6</sup>, Cetea-Picuiata<sup>7</sup> and Poiana Ampoiului-Piatra Corbului<sup>8</sup>. A group of artefacts can be observed in the sites placed on two neighbouring areas, in the Eastern foothills of the Apuseni Mountains: Ampoi Valley and Cetea Valley. The discovery from Băile Herculane (Banat) is isolated of this area.

*Pendants made of marble* (fig. 1/5–7, 19; 2/6). Their number places them on the second place after the sandstone ones. The four marble pendants were discovered in three different areas: Transylvania (Cerișor-Peștera no. 1<sup>9</sup>), Banat (Băile Herculane-Peștera Hoților – 2 pieces<sup>10</sup>) and North-Western Bulgaria (Rabicha-Magurata Cave<sup>11</sup>).

*Pendants made of limestone* (fig. 1/9, 18). The use of this stone as raw material is illustrated by a finished piece found at Peștera Igrița, in Bihor County<sup>12</sup>. The pendant made of “white stone”, recovered from the Coțofeni habitation, from Gârliște-Peștera Galaț<sup>13</sup> could, probably, be included in this category, too.

We have to emphasise the fact that none of these pieces, known until nowadays, is ornamented, no matter the raw material used. The surfaces of the pendants are only very well finished<sup>14</sup>.

<sup>4</sup> There are 13 pendants made of sandstone which were identified in the sites mentioned here. There is added the unknown number of the pieces discovered at Ampoița-La Pietre. These belong to a supposed workshop and their total number should be of minimum 15.

<sup>5</sup> CIUGUDEAN, GLIGOR 2003, p. 40; SOBARU, ANDREI 2005, p. 36, pl. VI/1.

<sup>6</sup> PETRESCU, POPESCU 1990, p. 64, pl. XI/4; also CIUGUDEAN 2000, p. 31, pl. 132/1.

<sup>7</sup> Unpublished materials. Excavations by Cristian I. Popa, Cristinel Plantos (2005).

<sup>8</sup> REPARHALBA 1995, p. 149; CIUGUDEAN 2000, p. 31, pl. 132/2–6, 8–9.

<sup>9</sup> The piece is made of grey marble; ROMAN ET AL 2000, p. 12; BELDIMAN, SZTANCS 2005a, p. 50–51, 57, 59, 68, tables 1–2, fig. 1; 3/3–4; 10–12; ROMAN 2008, p. 113, fig. LXI/6.

<sup>10</sup> ROMAN 1976, p. 18, pl. 52/32–33; ROMAN 1977a, pl. 39/17; ROMAN 2010, p. 26, fig. 57/15–16.

<sup>11</sup> DŽAMBAZOV, KATINČAROV 1974, fig. 9; ALEXANDROV 1990, p. 40, pl. 45/5.

<sup>12</sup> EMÓDI 1984, p. 406, fig. 4/11.

<sup>13</sup> ROGOZEA 1986, pl. IX/3.

<sup>14</sup> H. Ciugudean mentions the fact that the pendant discovered at Peștera Igrița is decorated with stripes (CIUGUDEAN 2000, p. 32). The so-called ornamentation is, actually, the section of the piece's profile in the I. Emödi's drawing.

The pieces made of sandstone are the most numerous. We believe that these could have been locally produced. H. Ciugudean formulated the hypothesis according to which at Poiana Ampoiului, there was a place where the sandstone pendants were made. His affirmation is based on the high number of finished objects (fig. 1/1–2, 4, 8, 10) and, especially, on the discovery of the unfinished artefacts<sup>15</sup> (fig. 1/15–16). The discovery of a similar piece on the same Ampoi Valley, in the Coțofeni settlement from Ampoița-*La Pietri*, determines the author to raise the problem of the workshops. Were they made in the same workshop or in different ones<sup>16</sup>?

Our discoveries from Cetea-*Picuiata* allow us to advance the hypothesis according to which the pendants of sandstones were made in different workshops. At Cetea-*Picuiata* four pieces were recovered, three of them being unfinished (fig. 1/12–14) and a single one finished (fig. 1/11). The raw material used for the adornments from Cetea could come from the sandstone sediments, placed in the neighbourhood of the site, on Cetița Valley. It is placed at about one km far of *Picuiata*. The in-site manufacture of the pieces is, also, suggested by the discovery of small pieces of sandstone, at Cetea. These were, of the same type, with thickness and shapes closed to the ones of pendants (fig. 2/5). At least in this case, the presence of this raw material within the site was an intentional one (the area is one of limestone). The sandstone pendant discovered at Băile Herculane-*Peștera Oilor*, in the area of Coțofeni habitation, is supposed to be made of local stone, which source was identified at one km far from the cave<sup>17</sup>.

The case of the pendants made of limestone is clearly illustrated by the piece discovered at *Peștera Igrița*. The raw material was, also, in the neighbourhood, so we can assume its local origin.

The sources for marble pendants were not mentioned and, in this context, it is difficult to establish if we deal with locally manufactured artefacts or obtained by trade. The morphological similarities of the pendants included by us in the B type (fig. 1/5–7) determined C. Beldiman and D.-M. Sztancs to advance the hypothesis regarding their commune source of manufacture in a specialised workshop<sup>18</sup>. However, we note that this raw material is the only stone used by the Coțofeni communities from the South of the Danube in order to obtain pendants, but in this area these are known only by the C type<sup>19</sup>.

The first stage in pendants manufacture consisted in splitting stones (sandstone, marble, limestone) which were, most probably, specially chosen due to their dimensions which were closed to the ones of the finite object. The next stage included the cutting of the desired shape. This was followed by the finishing and, at the end, the pendant was perforated using drilling technique (fig. 3). In the case of the marble pendant from Cerișor, it was established that the edges and the surfaces were, initially, shaped then finished<sup>20</sup>. The difficulty in perforating was given by the raw material used. The sandstone and limestone were easier to manufacture. The technical procedures of perforation are various. The cases where the pieces could have been directly studied or the drawings are detailed allowed us to identify two ways of perforating: one-sided perforation (fig. 1/3–4) and bilateral perforation (fig. 1/2, 9–10).

#### IV. Dating

The earliest stone pendants are those made of marble. They appeared for the first time during the second stage of Coțofeni culture, in the 1<sup>st</sup>–7<sup>th</sup> levels of Băile Herculane-*Peștera Hoșilor* and in one of the Coțofeni levels of Cerișor-*Peștera no 1*. Another pendant, made also of marble, is, probably,

<sup>15</sup> CIUGUDEAN 2000, p. 31.

<sup>16</sup> CIUGUDEAN, GLIGOR 2003, p. 40.

<sup>17</sup> PETRESCU, POPESCU 1990, p. 64.

<sup>18</sup> BELDIMAN, SZTANCS 2005a, p. 57.

<sup>19</sup> The attempts to identify the stones used for the most of the pendants dated from this period or the followings are few. For example, the red porphyry from which a pendant from Mala Gruda – Montenegro (Ljubljana culture) was made of could come both from the Balkans and the Carpathians (HORVÁTH ET AL 2013, p. 27, reference 4).

<sup>20</sup> ROMAN 2008, p. 113.

dated at the end of this phase. It was discovered at *Magurata Cave* (Bulgaria). The rest of the stone pendants made of sandstone or limestone can be dated, in most of the cases, in the third stage of the Coțofeni culture<sup>21</sup>.

## CONCLUSIONS

From the ideas mentioned above, we could notice the existence of the stone pendants, but we can also underline their small amount used by the Coțofeni communities. The same situation is registered for the pendants made of animal canines<sup>22</sup>, bone, antler<sup>23</sup> or clay<sup>24</sup>.

A pendant made of metal, similar to those from the A type (made of stone) was found in Bănița-*Peștera Bolii*<sup>25</sup>, dated in the third stage of Coțofeni culture. It is possible that some of the almond-shaped pendants (A type) to represent imitations of the red deer canines<sup>26</sup>. Despite the lack of this kind of discoveries in funerary contexts, we might assume that these pendants were worn hanged at the neck, individually, on a vegetal, textile or leather support (fig. 4/A-B), but they could also have been sewn on clothes<sup>27</sup> (fig. 4B/2). It is difficult to mention if the Coțofeni pendants are simple adornments or amulets with magic and religious role. Analogies with the archaic societies suggest that these types of adornments<sup>28</sup> were important symbols of tribal or personal distinction or had a ceremonial use<sup>29</sup>. The adornments from Deba Cave are a good example in this respect. There were 20 pendants which had been used since the Upper Paleolithic. Fourteen of them formed a necklace of large size<sup>30</sup>. This hypothesis is confirmed by a trapezoidal pendant made of red porphyry which was discovered in the “princely” *tumulus* grave of Mala Gruda<sup>31</sup>, dated in the Early Bronze Age.

Nowadays, a certain area of production of sandstone pendants dated from Coțofeni culture is highlighted on the Ampoi and Cetea Valleys. Until now, there are three sites where finite artefacts

<sup>21</sup> In our opinion, the dating of two discoveries dated from the second stage of the Coțofeni culture should be discussed. Firstly, we consider that the A grave from *Peștera Igrița* which was dated in Baden culture (EMŐDI 1984, p. 406, fig. 4/11) should be dated in Coțofeni culture (the third phase) (POPA 2004, 122–124, pl. IV/8b). Secondly, the Coțofeni depositions from *Peștera no. 1* of Cauce, which most of them are considered to be specific to Coțofeni II type (ROMAN 2008, p. 58, 103–106, 113, 177, 179, 211, 277–278, pl. LXIX–LXXX), could also be dated from the third stage of Coțofeni culture, due to the general aspect of the ceramics. In the site, materials of this type are also noted (ROMAN 2008, p. 107). In this case, it was important to be mentioned the Coțofeni level from which the adornment was recovered (from the two of them identified during the excavation).

<sup>22</sup> There are nine Coțofeni archaeological sites where this type of adornments were discovered: Băile Herculane-*Peștera Hoților* (ROMAN 1976, p. 18, pl. 52/22, 37–39; ROMAN 2010, p. 27, fig. 57/18, 20–22; Bănița-*Peștera Bolii* (BURNAZ 1989, p. 235); Cerișor-*Peștera Cauce* (LUCA ET AL 2004, p. 77–78, pl. VII/7–8; BELDIMAN ET AL 2004, p. 87; BELDIMAN ET AL 2005a, p. 482, table 3; BELDIMAN, SZTANCS 2005a, p. 47–48, 57, 59, tables 1–2, fig. 1; 5/2; 10–12; CIUGUDEAN ET AL 2005, p. 12); Giurtelecu Șimleului-*Coasta lui Damian* (BEJINARIU 2005, p. 52, 55, pl. V/3); Prihodiște-*Peștera Prihodiște* (RIȘCUȚA ET AL 2012, p. 65, pl. V/2); Rabicha-*Magurata Cave* (ALEXANDROV 1990, p. 40); Rogova-*La Cărmăzi* (CRĂCIUNESCU 1996, p. 100); Șeușa-*Gorgan* (BELDIMAN, SZTANCS 2005b, p. 370–371, table 9; BELDIMAN ET AL 2005b, p. 29–31, 33–34, table 2, pl. 7/14–16, 32; BELDIMAN ET AL 2006, p. 11–12, fig. 1–4).

<sup>23</sup> The adornments from Băile Herculane-*Peștera Hoților* (ROMAN 1976, p. 18, pl. 52/17, 21, 25–26; ROMAN 2010, p. 27, fig. 57/19); Coțofeni-*Botu Mare* (ROMAN 1976, p. 18, pl. 52/25–26); Ohaha Ponor-*Peștera Bordu Mare* (BELDIMAN, SZTANCS 2005a, p. 55, 57–59, 68, tables 1–2, fig. 1; 9–12; to which another piece is added – LUCA ET AL 1997, p. 17, pl. I/1 – possible Coțofeni); Rabicha-*Magurata Cave* (ALEXANDROV 1990, p. 40).

<sup>24</sup> PĂUNESCU 1979, p. 46; LAZĂR 1995, p. 195; CIUTĂ ET AL 2007, p. 357; DIMA, OARGĂ 2004, p. 50–51, pl. V/9.

<sup>25</sup> POPA 2011, p. 40–41, fig. 1/2.

<sup>26</sup> For example, numerous bone pendants discovered in several deposits with prestige goods dated from Cucuteni culture imitate the red deer residual canines (BELDIMAN, SZTANCS 2000–2006, p. 3–19, fig. 1, 6–8, 11–12, 14).

<sup>27</sup> BELDIMAN, SZTANCS 2005a, p. 57, fig. 3/4.

<sup>28</sup> See MOOREHEAD 1917, p. 46, fig. 4, 22, 27.

<sup>29</sup> HODGE 1907, p. 16–20.

<sup>30</sup> PEÑALVER ET AL 2006.

<sup>31</sup> BAKOVIĆ, GOVEDARICA 2009, p. 19, fig. 7/1.

and blanks were discovered. These are: Poiana Ampoiului-*Piatra Corbului*, Ampoița-*La Pietre* and Cetea-*Picuiata*.

For the moment, in the cultural environments which are contemporary with Coțofeni culture, adornments of this type made of stone are very rare. In this respect, we could quote the pendant discovered at Budapesta – *Andor utcai* dated from Baden culture. It is similar to the Coțofeni ones, A type. At the piece discovered at Budapest, details which indicate the re-perforation of the piece are very well preserved<sup>32</sup>. There is another pendant from Baden environment which was made of a black stone and whose type is unknown for Coțofeni culture. It was discovered at Muhi (Hungary)<sup>33</sup>. A pendant made of sandstone was discovered at Sarvaš and it was dated from Vučedol culture<sup>34</sup>. A pendant made of red porphyry was discovered in a princely tumulus from Mala Gruda and it was dated in a post-Vučedolian period. This has been already mentioned and it is dated from Ljubljana culture<sup>35</sup>. Likewise, items made of sandstone appear in Cetina culture, in the Western part of the Balkans<sup>36</sup>. Similar pendants made of clay, stone or bones were also recovered from Bronze Age contexts<sup>37</sup>. In the North of Europe similar pieces are made of amber. They are found more rarely until the First Iron Age<sup>38</sup>.

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<sup>32</sup> ENDRŐDI 1997, p. 130, fig. 45/8; TÉZER, ENDRŐDI 2004, p. 60, no. cat. 108.

<sup>33</sup> HELLENBRANDT 2008, p. 46, fig. 16/9.

<sup>34</sup> BALEN 2005, p. 58, pl. 70/268.

<sup>35</sup> BAKOVIĆ, GOVEDARICA 2009, p. 19, fig. 7/1.

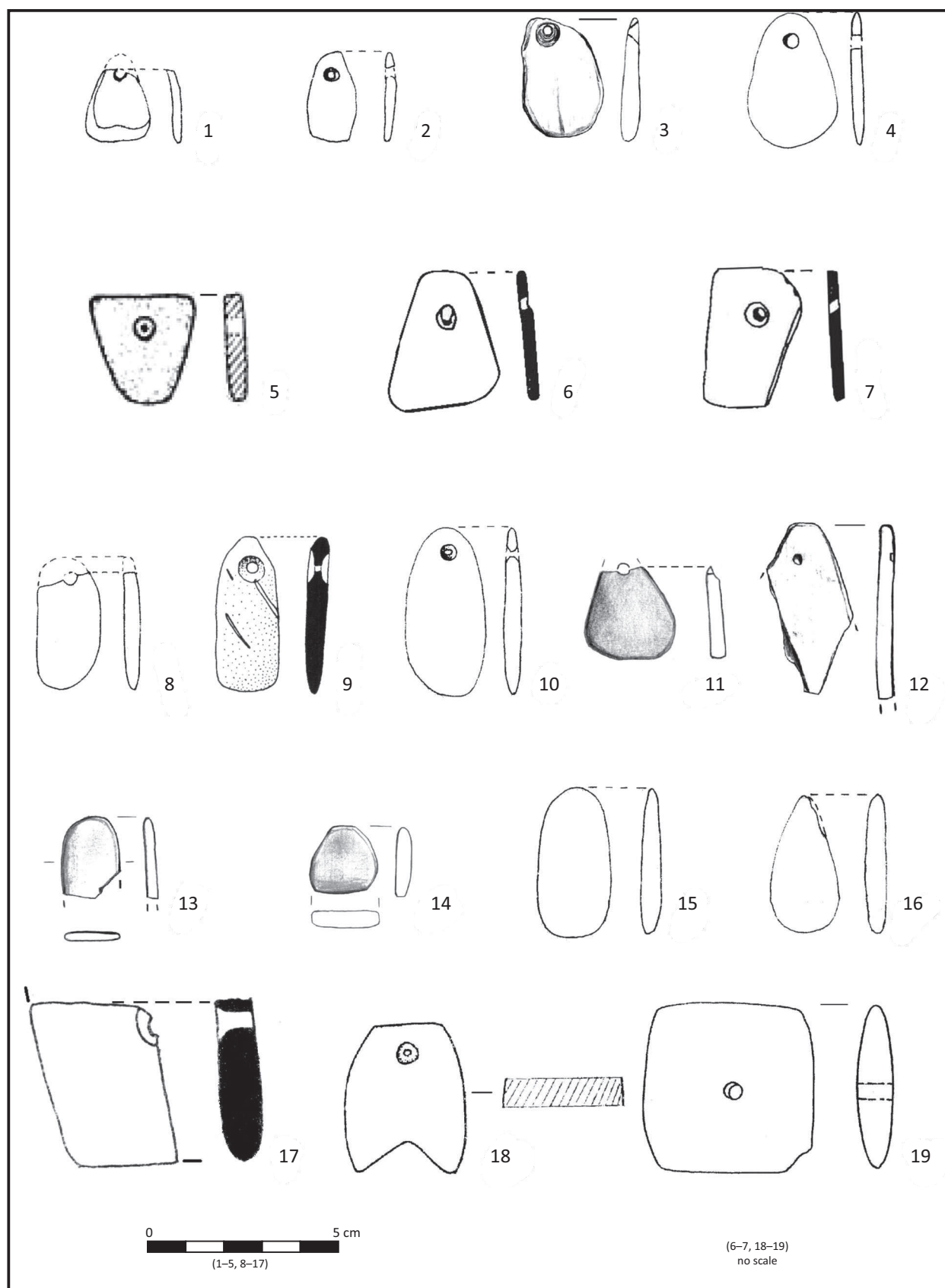
<sup>36</sup> GOVEDARICA 2006, p. 34, pl. 2/6.

<sup>37</sup> CHIDIOȘAN 1980, p. 24, fig. 7/10a-b (Derșida); EMŐDI 1997, p. 487, fig. 13/24 (Peștera Ungurului); KACSO 2003, p. 82, fig. 5/1 (Lăpuș). A piece made of stone, with a beginning of a bilateral perforation is known from Peștenița (Hunedoara County) (TATU ET AL 1988–1991, 98, fig. 10/11). Two pendants made of sandstone were discovered at Viișoara (Bistrița-Năsăud County). These were recovered from a settlement with Coțofeni, Wietenberg and Noua artefacts (MARINESCU 1983–1984, p. 32, pl. XXIX).

<sup>38</sup> EMŐDI 2000, p. 98, fig. 2/11; HARDING 2004, p. 64, pl. 36/3; BÁTORA, RASSMANN 2007, p. 39, Abb. 11/3.

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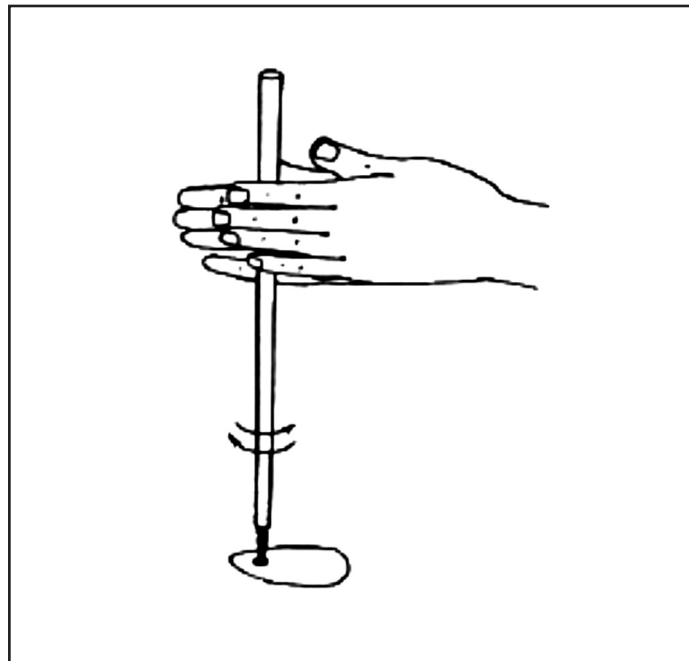
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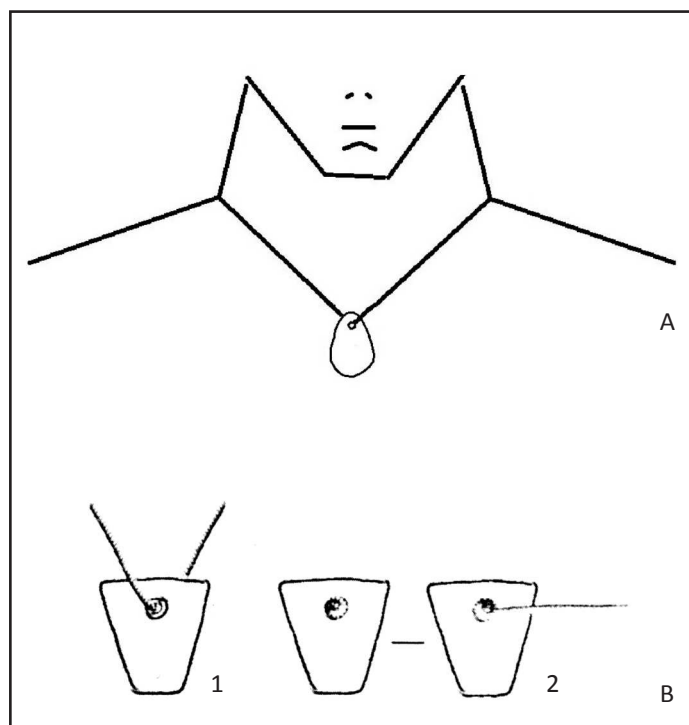
**Fig. 1.** Coțofeni pendants made of: sandstone (1-4, 8, 10-16), marble (5-7, 19), limestone (9, 18): Poiana Ampoiului-Piatra Corbului (1-2, 4, 8, 10, 15-16); Ampoița-La Pietri (3); Cerișor-Peștera no. 1 (5); Băile Herculane-Peștera Hoșilor (6-7); Băile Herculane-Peștera Oilor (9); Cetea-Picuiata (11-14); Gârliște-Peștera Galaț (17); Peștera-Igrița Peștera (18); Rabicha-Magurata Cave (19) (after CIUGUDEAN 2000 - 1-2, 4, 8, 10, 15-16; ROMAN 1976 - 6-7; PETRESCU 2000 - 9; ROGOZEA 1986 - 17; EMÖDI 1984 - 18; ALEXANDROV 1990 - 19).



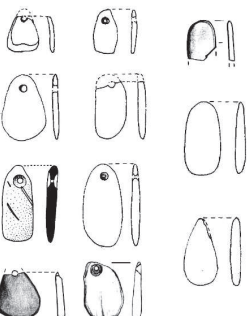
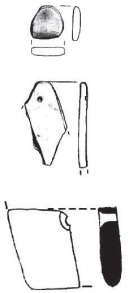
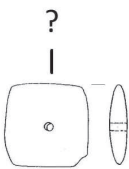
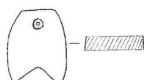
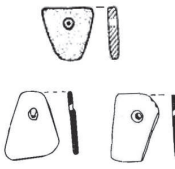
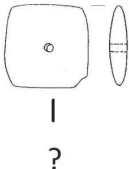
**Fig. 2.** Coțofeni pendants made of sandstone from Cetea-Picuiata: finished piece (1), unfinished pieces (2-4) and raw materials (5) (1-5 – unpublished; 6 – after BELDIMAN, SZTANCS 2005a).



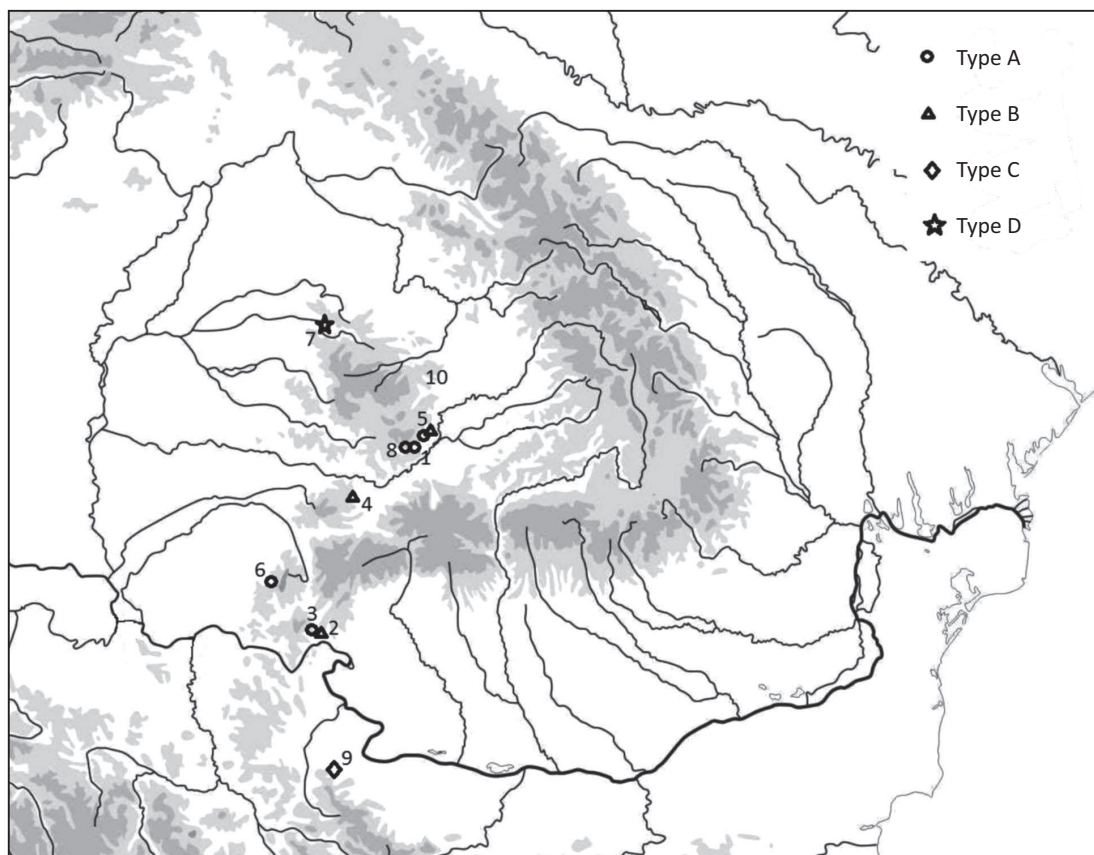
**Fig. 3.** Technical procedure applied for perforating the pendants using a bow-drill (after Beldiman, Sztancs 2000–2006).



**Fig. 4.** Hypothesis of wearing the Coțofeni pendants made of stone (1 – after POPA 2011; 2 – after BELDIMAN, SZTANCS 2005a).

| Coțofeni  | Type A  | Type B  | Type C   | Type D  |
|-----------|---|---|--|---|
| phase III |  |  |  |  |
| phase II  | ?   |  |  | ?   |
| phase I   | ?   | ?   | ?  | ?   |

**Fig. 5.** Typology and chronology of Coțofeni stone pendants.



**Fig. 6.** Map of spreading of Coțofeni stone pendants

# AN ANTHROPOMORPHIC CLAY FIGURINE DISCOVERED AT ȘOIMUȘ – “TELEGHI”, HUNEDOARA COUNTY

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**Keywords:** Șoimuș – “Teleghi”, figurine, Late Bronze Age, clothing, adornment.

**Abstract:** The small piece we present is a clay anthropomorphic figurine, found after the uncovering of the surface placed on the highway, in Șoimuș – “Teleghi” site, in the cultural layer of the Bronze Age settlement located here. The figurine has a truncated cone shape. The décor is made of small circular incisions and narrow kennels imprinted in the raw paste.

We have discovered the closest analogies shape-wise in the settlement of Balta Sărată cultural group from Ciuta – “Grajdurile CAP”, Caraș-Severin County and in the settle-

ment of Suci de Sus Culture from Mesteacă – “Valea Case-lor”, Maramureș County.

The adorning elements are orderly, reproducing décors of clothing or adornments attached to the clothing or worn over it. We may consider them circular bronze rings or adornment pieces made of shells. We can also presume that the circles represent decorative seams of the clothing.

Perhaps the lack of sexual elements in the case of these pieces can make us think not of human beings, but of androgynous or asexual divinities. If we insist on considering them human, they could be either priestesses or priests, caught in the act of worshipping the divinity, with their arms open, or dancing persons, with their arms open or placed on their hips.

The preventive archaeological research on Deva – Orăștie section of the highway, carried out in 2011, in Șoimuș, “Teleghi” site, has revealed a rich archaeological material.

The piece that we present is an anthropomorphic clay figurine (Fig. 1/1). Its shape and, especially, its décor recommend it for the topic of this volume.

The figurine was discovered after the uncovering of the surface on the highway, in the middle of the area, between kilometers 30+220 – 30+240, inside the Bronze Age cultural layer of the settlement. Under these circumstances, as the ceramic material associated with, is mixed up, it is not possible to determine, with high degree of accuracy, the figurine’s cultural and chronological origins. We mention this, because after eliminating the fragments from other historical ages (Neolithic, La Tène, Early Middle Age), the ones that remain are those belonging to the Middle and Late Bronze Age, periods during which the settlement was widely inhabited.

The preservation of the figurine is quite good, but its head, as well as a fragment from its base, is missing. The size of the piece, in its current condition, is: High = 5.2 cm; Width = 2.9 cm. It is made of a fine paste, its surface being polished. The burning was uneven, the side above the arms being a yellowish colour, the rest being of a dark brown, almost black, colour.

The figurine has an approximately truncated cone shape. The anthropomorphic outline was obtained by slightly flattening the middle side – the arms being shaped out of it, laterally – as well as the upper side, where, probably, the head was hardly sketched, having a conic shape, with a rounded

top. The waist is accentuated under the arms, by enlarging the lower part, which is also used as a stand. The latter is slightly concave, thus ensuring the verticality of the piece, which is slightly leaning backwards. Seen from aside, the outline is an orthogonal triangle.

The décor is made of small circular incisions and narrow kennels, imprinted in the raw paste. The incisions were, in all likelihood, made with two instruments, with a tubular tip and sharp edge of different diameters. This can be observed because the circles, laid concentrically, in pairs, are eccentric, in some cases.

The layout of decorative elements, on the front, starting from the top, is as follows: on the neck, centrally laid, there are two concentric circles; on the neck base, with the ends overlapping the side edges of the piece, there are two horizontal kennels, slightly arched downwards; at the arms level, from one end to another, there is a row of concentric circles, arched downwards, as well; in the middle area, starting from under the arms and down to the base, three parallel rows of circles laid vertically, the middle row being longer; at the waist level, all around it, there is a row made of the same elements, which intersects the above registry. Under it, on each side, there is a group of concentric circles (although in the bottom left side there is a fragment missing, we believe that the ornament was symmetrical, on both sides). On each side, on the edges of the figurine, between the extremities of the arms and head, there is a vertical row of plain circles.

We have discovered the nearest analogies, shape-wise, in the settlement of Balta Sărată cultural group, from Ciuta – “Grajdurile CAP”, Caraş-Severin County<sup>1</sup> (Fig. 1/2) and in the settlement of Suciul de Sus culture, from Mesteacăn – “Valea Caselor”, Maramureş County<sup>2</sup> (Fig. 1/3).

In the first case, the figurine, partially preserved (torso and arms), is decorated with a vertical median row of two concentric circles, on the front. In the arm part, starting from this row towards the sides, there is an U-shaped motive incised, prolonged, brought down, with the opening towards the middle, and having the sides tied between them by several parallel lines. This motive is framed by a row of circles resembling the medium one, which follows its shape. On the back, in the neck area, there is a horizontal row made of the same concentric circles and the rest of the back is almost completely covered in similar circles.

In the second case, the figurine was almost entirely preserved, missing only a fragment from the base, but the surface is eroded, the details being vaguely preserved or missing altogether. Its adornment, visible more clearly in the picture<sup>3</sup>, has, on the front, from the chest downwards, a décor similar to the piece from Şoimuş, except that there seem to be five rows of circles, their length growing from the middle to the extremities. In the back, in the upper side, there are two rows of circles, arched downwards, and there are another two on the neck, parallel to the former. On the head, the décor elements are vague, although in the drawing of the figurine<sup>4</sup> there are two median circles, one under the other, the upper one being prolonged. On one side, there are two groups of circles, one under the head and the other towards the base, which is probably repeated on the other side.

Our piece, together with its analogies, belongs to a certain art pattern present in different cultural areas, but situated approximately in the same chronological frame, at the end of the Middle and Late Bronze Age. The figurine from Mesteacăn – “Valea Caselor” was discovered in a stage II settlement of Suciul de Sus culture, the one in Şoimuş – “Teleghi”, in the stage III–IV settlement of Wietenberg culture, and the one from Ciuta – “Grajdurile CAP”, in a stage III settlement of Balta Sărată cultural group<sup>5</sup>. Thus, we can conclude that we are dealing with a pattern spread at that time in a wide area and, more probably, which travelled from Mountainous Banat area up to Maramureş area (the figurine from Mesteacăn being from a latter period), being appreciated for its shape or signification.

The pattern represents a person with his arms open or with the hands on their hips, wearing long cloths that covered their legs, which is suggested by the fact that those are not reproduced, just

<sup>1</sup> ROGOZEA 1992, p. 50–51.

<sup>2</sup> KACSÓ 1987, p. 56, fig. 9/9, p. 59; KACSÓ 2004, p. 70, pl. XLVIII/1.

<sup>3</sup> KACSÓ 2004, pl. XLVIII/1.

<sup>4</sup> KACSÓ 1987, p. 56, fig. 9/9.

<sup>5</sup> GUMĂ 1997, p. 54.

like the ones, in Wietenberg and Tei cultures<sup>6</sup>. This reproduction pipe can be found in South-Western Romania, being developed and chiselled within Žuto Brdo – Gârla Mare cultural complex<sup>7</sup>, but, also, in the North-Western part of the country, being simplified (the figurines maintain their frontal profile, but they are flatten), within Otomani culture and Cehăluț cultural group<sup>8</sup>. For the time being, we do not know if the pattern presented by us is a prototype for the others, but the connections are evident.

Returning to the appearance of our figurine, due to which it was brought to your attention, a few observations must be made. We previously stated that it wears a long gown, like a frock or dress. The adorning elements are, orderly, reproducing décors of clothing or adornments attached to the clothing or worn over it<sup>9</sup>. If we consider the circular bronze rings, like the one discovered in the Wietenberg III settlement from Deva – “Dealul Cetății”<sup>10</sup>, the appearance of which is almost identical, we can assert that the character used to wear a ring around the neck as a pendant, and lower, on the chest, a necklace made of such pieces, and around the waist a belt made of rings or some kind of fabric to which the rings were attached. Around the neck, one can also see two other adornment accessories, rendered by the two parallel kennels. The front and side elements could also be the representation of rings attached to clothing. We can, also, presume that the circles represent decorative seams of the clothing.

Further on, those circles could render adornment pieces made of shells. Inside the Bronze Age complexes from the settlement of Șoimuș – “Teleghi”, numerous *Unio* shell conches have been found with perforation of the bulge area. They could be sown on the clothing or on a textile or leather base, from which the belt and necklace were made. What is certain is the fact that the character is represented wearing an adorned cloak and adornments. This could either suggest the character’s status, or some kind of clothing worn during special events in the life of the community: holidays or rituals.

Moreover, regarding references to clothing, the generic identity of the character can also be brought to your attention. The piece from Ciuta – “Grajdurile CAP” has been considered, probably, to be “a female anthropomorphic idol”<sup>11</sup>. The same can be said about the statues belonging to Gârla Mare<sup>12</sup>, although it could represent, especially, due to the richness of the décor, not only feminine divinities, but also women from the community wearing celebratory garment. In these cases, the sex was determined based on the shape and ornaments. Nevertheless, on Romania’s territory and in the vicinity, the sexual details are rarely represented on figurines belonging to the Bronze Age cultures. If we were to consider as male characters only those figurines that have legs, this reasoning cannot be generalized, as the figurines with legs belonging to Tei culture, from Căscioarele – “Valea Coșarului”, Giurgiu County have breasts<sup>13</sup>, and the ones belonging to Nicoleni – “Panta cu Șuri”, Harghita County have male genitalia<sup>14</sup>. Likewise, we can assert, with certainty, that the similar shapes of our figurine are typical only of female characters. It is, perhaps, the lack of sexual elements in the case of these pieces that can make us think not of human beings, but of androgynous or asexual divinities. If we insist on considering them human, they could be either priestesses or priests, caught in the act of worshipping the divinity, with their arms open or dancing persons, with their arms open or placed on their hips.

In an attempt to draw a temporary conclusion, the features of the Bronze Age pottery reproduced in this figurine are a rich testimony of the garment of the age. It is about the possibility of transmitting symbols, the personification of an imaginary and religious universe, still shadowed by the scarceness of such discoveries. Lastly, it is a proof of the mastery of the craftsman who modelled it.

<sup>6</sup> DIETRICH 2011, p. 105, pl. 1/1–21.

<sup>7</sup> ȘANDOR-CHICIDEANU 2003, p. 101–112.

<sup>8</sup> DIETRICH 2011, p. 105, pl. 2/2–16, 20, 23.

<sup>9</sup> ROGOZEA 1992, p. 51.

<sup>10</sup> ANDRIȚOIU 1992, p. 85, 240, pl. 72/43.

<sup>11</sup> ROGOZEA 1992, p. 51.

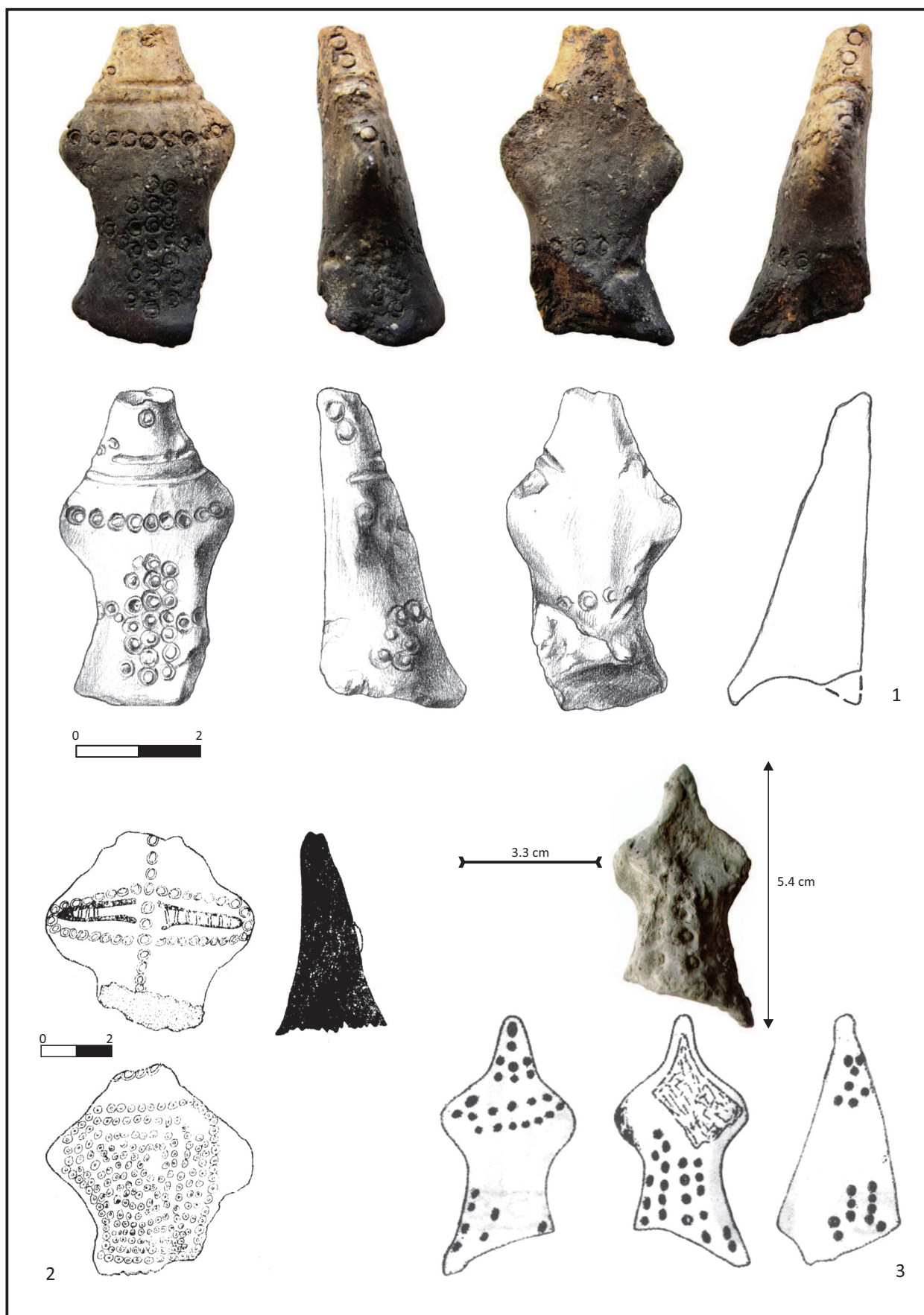
<sup>12</sup> ȘANDOR-CHICIDEANU 2003, p. 110–112.

<sup>13</sup> DIETRICH 2011, p. 98, p. 105, pl. 1/1–4.

<sup>14</sup> DIETRICH 2011, p. 97, p. 105, pl. 1/28–29.

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**Fig. 1.** The anthropomorphic clay figurines from: Șoimuș - "Teleghi", Hunedoara County (1) (photo Antoniu Marc), from Ciuta - "Grajdurile CAP", Caraș-Severin County (2) (after ROGOZEA 1992) and from Mesteacăn - "Valea Caselor", Maramureș County (3) (after KACSÓ 2004).



# SOCIAL IDENTITY IN THE LOWER MUREŞ VALLEY DURING THE LATE BRONZE AGE: TWO SEAL-HEADED PINS FROM PECICA “SITE 14” CEMETERY\*

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**Keywords:** Lower Mureş, Late Bronze Age, cemetery, social identity, seal-headed pins.

**Abstract:** Some new and, also, old discoveries belonging to

the Bronze Age were documented the last stages of that epoch. Starting from two bronze pins, in this paper the authors are attempt for providing a coherent overview of social identity in the end of the Bronze Age in the Lower Mureş area.

## INTRODUCTION

Rich archaeological discoveries that can be dated to the end of the Bronze Age were made in the Lower Mureş Valley since the second half of the 19<sup>th</sup> century. Among them one can mention stray finds such as the bronze items from Pecica, discovered in 1883<sup>1</sup>, the 23 gold jewels from Sântana “Cetatea Veche”<sup>2</sup>, the “black urns with protuberances, one of which contained bronze objects”<sup>3</sup>, from Munar, the so-called Pecica IV bronze deposit (1969)<sup>4</sup>, and the bronze artefacts found in the cemetery of Felnac (1971)<sup>5</sup>.

It is common knowledge that in the end of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century, archaeology was marked by researches performed by amateurs. Among such research in the area under investigation, one can mention L. Dömötör’s 1899 excavations in Arad “Gai” and Păuliş. The site in Arad “Gai” was also researched by specialist in numismatics J. Ferenci in 1909, by J. Zaray in 1911, by E. Dörner, collector Gh. Miloi and F. Baranyai in 1954, while, in 1962, the above mentioned E. Dörner, together with N. Kiss performed a new test trench<sup>6</sup>. One must also mention M. Moga’s 1939 excavation during which he was able to date the fortification in Corneşti to the Bronze Age<sup>7</sup>. In the

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<sup>1</sup> POPESCU, RUSU 1966, R 14/1–10; MOZSOLICS 1973, p. 168–169, Taf. 4; PETRESCU-DÎMBOVIȚA 1977, p. 41–42, Pl. 6; DAVID 2002, Taf. 134; BARBU ET AL 2002, no. crt. 162–175.

<sup>2</sup> DÖRNER 1960, p. 471–479; MOZSOLICS 1973, p. 208, Taf. 104–105.

<sup>3</sup> MILLEKER 1906, p. 98.

<sup>4</sup> PETRESCU-DÎMBOVIȚA 1977, p. 102, Pl. 176/29–22; p. 177; 178/1.

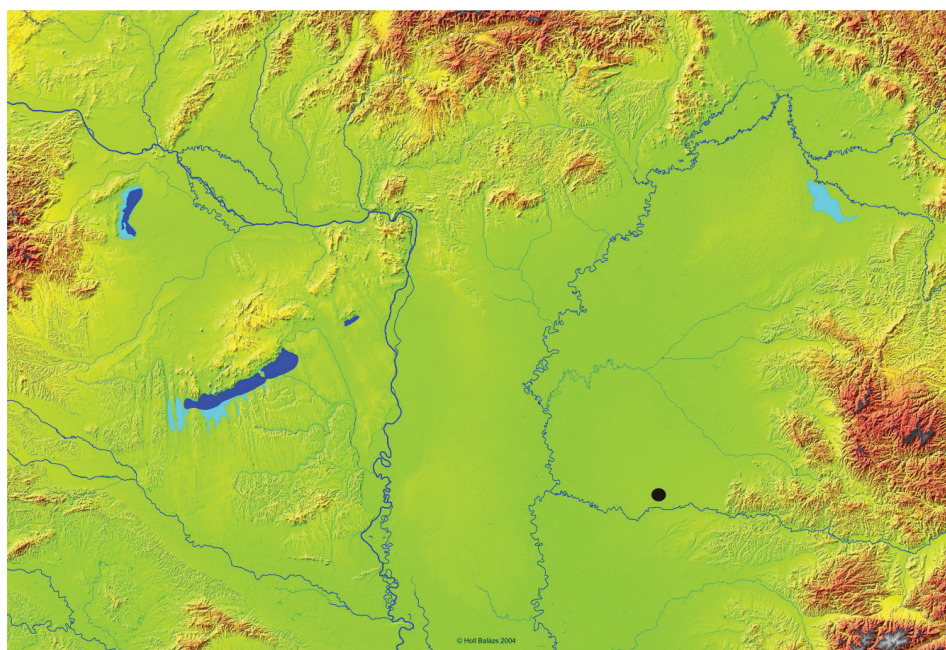
<sup>5</sup> PETRESCU-DÎMBOVIȚA 1977, p. 93, Pl. 142/9–17.

<sup>6</sup> For a more detailed history of research see SAVA, PĂDUREAN 2009, p. 36–37.

<sup>7</sup> MEDELEȚ 1993, p. 128–137.

context of the new interpretations of the large fortifications in the Lower Mureș, M. Rusu, E. Dörner and I. Ordentlich performed an excavation at the fortification in Sântana through which they attested the fact that the two above mentioned fortifications dated from the same period<sup>8</sup>. The cemetery from Tápé was uncovered during the 1960s and the site continues to be a reference landmark in studies focusing on the Late Bronze Age in this area<sup>9</sup>.

The need to understand the end of the Bronze Age in the area under discussion lead to the beginning of excavations at two of the most significant fortifications in the area, i.e. those in Cornești (2007)<sup>10</sup> and Sântana (2009)<sup>11</sup>. In the same time, infrastructure works, mainly for the Arad-Timișoara and Arad-Makó highways provided a unique opportunity in the development of a real perspective on the end of the Bronze Age. Due to rescue excavations performed between 2010 and 2011, members of the Archaeology Department of the Museum in Arad had the opportunity to excavate 28,800 m<sup>2</sup> (2.88 ha) of the settlement in Șagu “Site A1\_1” and 7,762 m<sup>2</sup> (0.77 ha) of the cemetery in Pecica “Site 14”. During the same period, the team from the museum in Szeged researched a precinct enclosed with ditches in Csanádpalota<sup>12</sup>.



**Fig. 1.** Partial map of the Carpathian Basin, with the location of the cemetery in Pecica “Site 14”.

All the above mentioned researches, the more recent ones in particular, provide specialists with a much more complex image of the Lower Mureș area and constitute a basis for pertinent discussions on Bronze Age society. The present article starts from two bronze pins discovered in tombs Cx\_004 and Cx\_098 part of “Site 14” in Pecica and aims at providing a coherent overview of social identity in the end of the Bronze Age in the Lower Mureș area.

## THE SITE

As part of the rescue excavations for the future Nădlac-Arad highway, members of the Archaeological Department of the Arad County Museum unearthed a Late Bronze Age cemetery, Pecica “Site 14”<sup>13</sup>. This new discovery is situated 3.5 km NNE from the center town of Pecica

<sup>8</sup> RUSU ET AL 1996; RUSU ET AL 1999.

<sup>9</sup> TROGMAYER 1975.

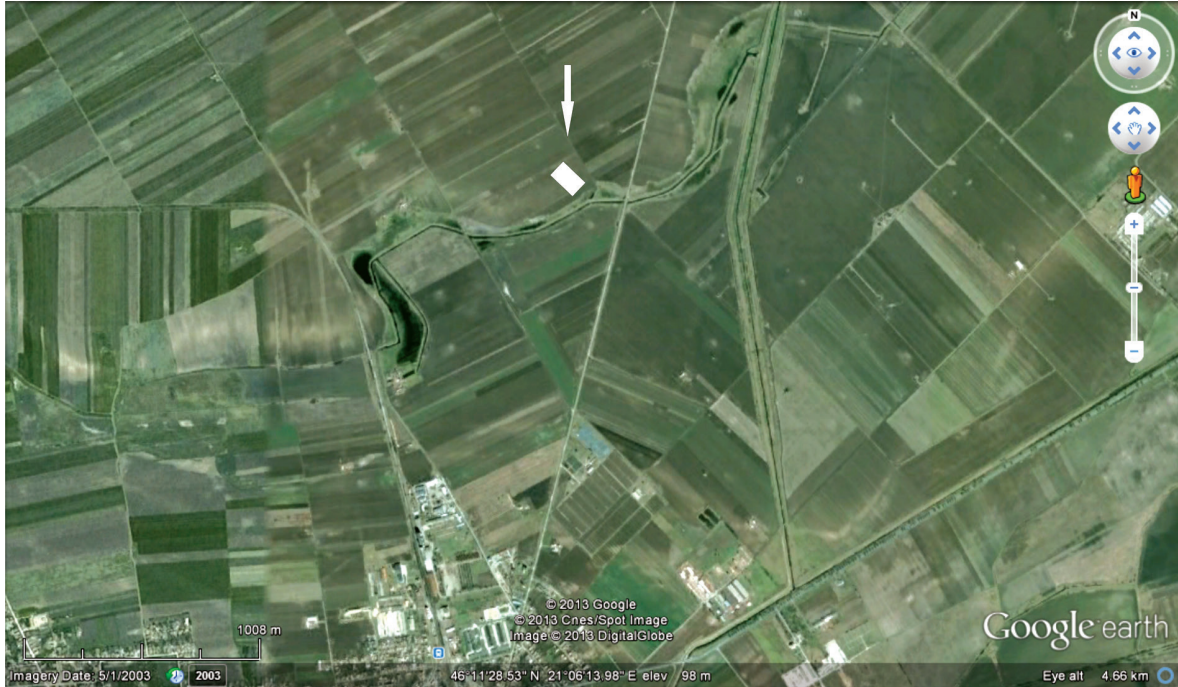
<sup>10</sup> GOGÂLTAN ET AL 2008; HEEB ET AL 2008, p. 185–186, Abb. 8; SZENTMIKLOSI ET AL 2011.

<sup>11</sup> GOGÂLTAN, SAVA 2010.

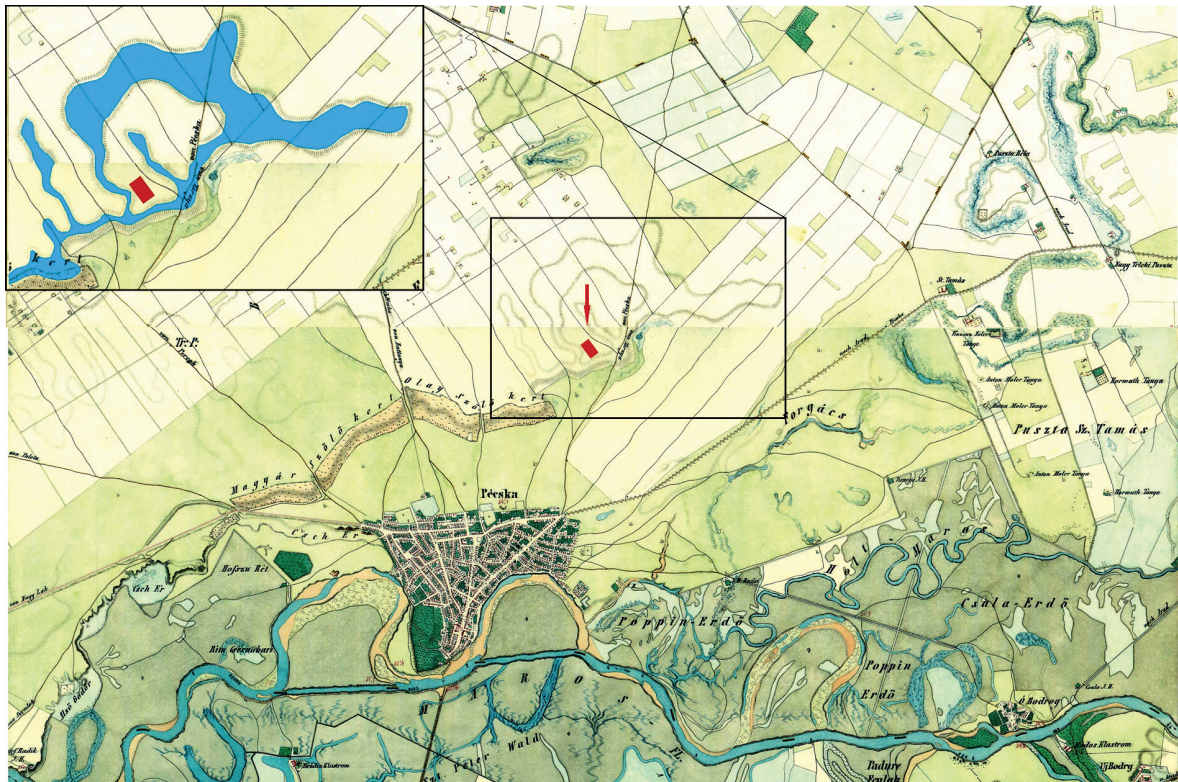
<sup>12</sup> CZUKOR ET AL 2013.

<sup>13</sup> The site was researched by a team that included Victor Sava, Florin Mărginean, George Pascu Hurezan, Luminița Andreica, Kapcsos Norbert, Zlatoie Țmor, Szekely Agnes, Anca Georgescu, Marian Radu and Marius Morar.

(Fig. 1; 2; 3). The field research performed in the close vicinity of the site, corroborated with mid-19<sup>th</sup> century maps, clearly indicates the fact that the site is located on the lower part of a terrace. On the above mentioned map, one can note that the low area surrounding the terrace is floodable (Fig. 3); specialists were able to calculate that the level difference between the base of the terrace and its highest point measured 6 m (from 98 m to 104 m in altitude).

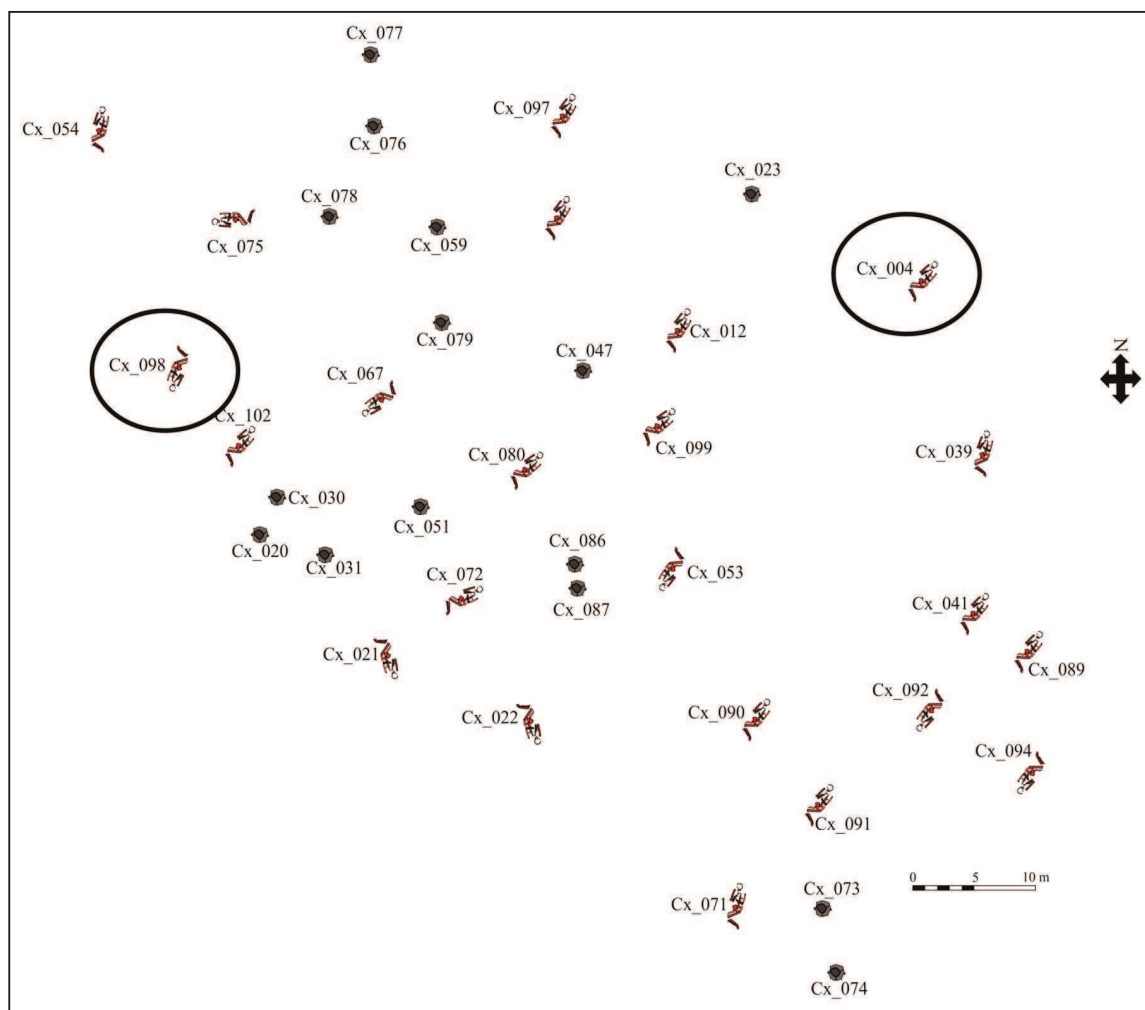


**Fig. 2.** Satellite image of the Northern area of the settlement in Pecica, with the location of the cemetery Pecica “Site 14” (taken from Google Earth).



**Fig. 3.** Map from the middle of the 19<sup>th</sup> century, with the location of the cemetery in Pecica “Site 14” and reconstruction of the floodable area (top left, in blue).

Inside the perimeter of the future highway the team identified 37 tombs, out of which 23 were inhumation burials and 14 cremation burials (Fig. 4). The deceased were, in their vast majority, crouched, and they displayed rich funerary inventories. Small cups and large pots were usually identified around their feet and hips. Cases in which animal parts were found close to the feet of the bodies are quite frequent. Apart from these, a great number of the deceased possessed quite rich funerary inventories consisting of pins, bracelets, appliqués, bronze daggers, or axes; amber beads were found in one tomb. Based on the funerary inventory of these graves, we can assert that the inhumation tombs belong to the Late Bronze Age chronological stage (Bronze B2-C).



**Fig. 4.** Topographic survey of the Late Bronze Age cemetery in Pecica "Site 14".

The urns of the cremation burials contained, almost in all cases, artifacts deposited as funerary inventory. This enabled the archaeologists to find a large quantity of small bronze artifacts such as simple or multi spiral rings or bracelets. In some of the urns small cups have been also documented. The fact that some of the urns were actually large pots is worth mentioning, but there are also cases in which the urns consist of small bowls. Based on the funerary inventory and the types of vessels used as cinerary urns we can date the cremation graves in the Late Bronze Age – BD-HA1 stage.

Besides this cemetery, the site includes an Early Bronze Age settlement<sup>14</sup>, a settlement dated to the third and fourth centuries A. D., while habitation traces from a temporary settlement of the twentieth century were found in some areas. The above mentioned successive settlements were identified through 61 archaeological features, mainly household pits, but also hearths or ditches. Due

<sup>14</sup> On the basis of the pits' inventories, one can state that the settlement was in use during the Early Bronze Age and that the pottery is of the Makó type.

to the existence of these three settlements, performed excavations revealed a deposition layer that measured between 0.40 and 0.60 m in thickness. Most of the identified tombs were thus deposited inside the layer that corresponds to the Early Bronze Age settlement, while some of them were disturbed by the 3<sup>rd</sup>–4<sup>th</sup> centuries settlement and the 20<sup>th</sup> century shelter.

## DESCRIPTION OF THE GRAVES

**Cx\_004**, Fig. 5; 7. The skeleton was crouched, with the head Northwards, the face towards the West and the lower body towards the South; the skull was well preserved, except for the viscerocranium (the facial skeleton). The preserved parts of the skeleton are the cranium, part of the right scapula, three rib fragments, one fragment from the right iliac wing, another fragment from the left iliac wing (pelvis), and the two femurs, absent the *epiphyses*. A pot that included a small cup was found by the lower part of the skeleton, 18 cm away from the left femur; another small cup was found near the pot. Few animal bone fragments were found West of the same pot. Five appliquéés were found around the upper part of the skeleton (one appliquéé was placed on the right side of the cranium, on the occipital bone; 3 others were found 8–10 cm West of the occipital bone; one other was located 20 cm North of the frontal bone); a pin was discovered in the cervical area; among the items of funerary inventory one can also mention a bronze loop. The skeleton belonged to a child, deceased at an age between 7 and 8. The pit in which it was buried measured 186 cm in length and 100 cm in width.

Seal-headed pin (Nadel mit Petschaftkopf) (Fig. 5/1); the upper part of the shaft decorated with two rows of grooves; the object displays an even layer of patina, light green in colour and in some points oxidized; length: 22.5 cm, head diameter: 1.8 cm, maximum thickness: 0.7 cm, weight: 32 gr.

Loop (Fig. 5/2); the item displays light green patina, in some points oxidized; length: 5.6 cm, thickness: 0.2 cm, weight: 0.8 gr.

Appliquéé (button) (Fig. 5/3); slightly concave profile, has two orifices (punched from the inside out), placed on the sides, and measuring 0.02 cm in diameter; the item broke in three fragments when lifted, the patina is light green; diameter: 2.3 × 2.4 cm, thickness: 0.04 cm; weight: 0.8 gr.

Appliquéé (button) (Fig. 5/7); slightly concave profile, has two orifices (punched from the inside out), placed on the sides, and measuring 0.02 cm in diameter; the item broke in two fragments while lifted, the patina is light green; diameter: 2.4 × 2.4 cm, thickness: 0.04 cm; weight: 0.8 gr.

Appliquéé (button) (Fig. 5/4); slightly concave profile, has two orifices (punched from the inside out), placed on the sides, and measuring 0.02 cm in diameter; the item was slightly damaged while lifted, the patina is light green; diameter: 2.5 × 2.4 cm, thickness: 0.04 cm; weight: 0.6 gr.

Appliquéé (button) (Fig. 5/5); slightly concave profile, has two orifices (punched from the inside out), placed on the sides, and measuring 0.02 cm in diameter; the item was slightly damaged while lifted, the patina is light green; diameter: 2.7 × 2.5 cm, thickness: 0.04 cm; weight: 0.6 gr.

Appliquéé (button) (Fig. 5/6); slightly concave profile, has two orifices (punched from the inside out), placed on the sides, and measuring 0.02 cm in diameter; the item was slightly damaged while lifted, the patina is light green; diameter: 2.5 × 2.4 cm, thickness: 0.04 cm; weight: 0.6 gr.

Small cup with slightly high handle (Fig. 5/8), flared rim and globular body; reducing firing, black colour, fabric with sand inclusions, smoothed surface; mouth diameter: 7.4 × 7.6 cm; maximum body diameter: 7.6 × 7.9 cm; thickness: 0.4 cm.

Small cup with slightly high handle (Fig. 5/9), flared rim and globular body, decorated with three circular projections located along the maximum body diameter; reducing firing, black colour, fabric with sand inclusions, polished surface; mouth diameter: 6.4 × 6 cm; maximum body diameter: 7.2 × 7.1 cm; thickness: 0.44 cm. (discovered inside the pot).

Pot with two small handles (Fig. 5/10), short neck, globular body and flat base, decorated with four circular protuberances on the body's maximum diameter; broken due to earth pressure; reducing firing, black colour, fabric with inclusions of sand, smoothed surface; mouth diameter: 10.2 × 9.8 cm; body diameter: 19.5 × 19.8 cm; base diameter: 8.9 × 8.4 cm; thickness: 0.7 cm.

**Cx\_098**, Fig. 6; 8. The skeleton was in a crouched position, with the head oriented southwards, face to the East, and lower body to the North. A pin was found under the mandible and two bracelets have been preserved on the upper limbs; the dagger was placed under the arms; animal bones were discovered at the feet; one small cup was placed obliquely right under the tibia; one bi-trunk-shaped pot was deposited by the phalanges; another small cup was discovered inside this pot; Cx\_38 (a 3<sup>rd</sup>–4<sup>th</sup> century pit) cut through the North-Western side of the tomb. The skeleton belongs to a male individual deceased at 35–39 years of age. Several enthesopathies were noted during the anthropological analysis.

Seal-headed pin (Nadel mit Petschaftkopf) (Fig. 6/1); the upper part of the shaft is decorated with two rows of grooves; one central groove marks the edge of the head; the item displays an even layer of dark green patina, oxidized in some places; length: 27.7 cm, head diameter: 1.8 × 1.7 cm, maximum thickness: 0.74 cm, weight: 55 gr.

Bracelet (Fig. 6/3); made of a rectangular bar with rounded edges, narrow, with the ends thinned and split, the body of the item is decorated with 12 groups of five-six symmetrically placed notches; no visible traces of casting, the object was well finished; the light green patina covers one part of the body, while the rest of the bracelet is covered in light green oxide; length: 16.9 cm, inner diameter: 5.8 × 4.92 cm, outer diameter: 6.5 × 5.38 cm, width: 0.48 cm, thickness: 0.4 cm, weight: 30 gr.

Bracelet (Fig. 6/2); made of a lozenge-section bar ending in spirals (made of bars circular in section); the item is decorated with six groups of seven-eight notches; the bracelet is very well finished; dark green patina covers almost the entire body and one of the ends is strongly oxidized; bar length: 22 cm, inner diameter: 5.7 × 4.5 cm, outer diameter: 6.42 × 4.8 cm; thickness: 0.4 cm; weight: 14 gr.

Dagger with straight blade (Fig. 6/4) and three rivets; the item is strongly oxidized; length: 19 cm, blade width: 3.08 cm, thickness: 0.28 cm, weight: 61 gr.

Small cup with slightly high handle (Fig. 6/5), flared rim and globular body; reducing firing, black and brick-red colour, fabric with sand inclusions, smoothened surface; mouth diameter: 7.6 × 7.3 cm; maximum body diameter: 8.2 × 7.9 cm; thickness: 0.4 cm.

Small cup with slightly high handle (Fig. 6/6), flared rim and globular body, decorated with three circular protuberances on the body's maximum diameter; reducing firing, black colour, fabric with sand inclusions, polished outer surface; mouth diameter: 7.6 × 7 cm; maximum body diameter: 8.7 × 8.6 cm; thickness: 0.5 cm. (discovered inside the pot).

Bi-trunk-shape pot with flared rim (Fig. 6/7), short neck, two handles and the lower part is decorated with an incised motif consisting of a star with four corners, the body's maximum diameter is decorated with oblique narrow grooves and four protuberances, the neck preserves two rows decorated with incised arches separated with grooves, the handles display a median groove each; reducing firing, light brick-red colour both inside and outside, black core, fabric with sand inclusions, smoothened; mouth diameter: 24.2 × 25 cm; body diameter: 31 × 30.2 cm; base diameter: 10.7 × 10.5 cm; thickness: 0.9 cm.

In case of tomb Cx\_004 in Pecica, the pin was discovered pointing upwards,<sup>15</sup> while the pin found in tomb Cx\_098 was discovered pointing downwards. As one can note in Fig. 10, one bronze appliqué was placed on the skull of the skeleton in Cx\_004; the item was, probably, attached to the shroud and, in this case, the pin might have been used in fixing that shroud. The pin in tomb Cx\_098 seems to have been deposited before the skull and not on one of the shoulders. It thus seems that the location of the two pins discovered in Pecica does not follow the pattern of those in Tápé (Fig. 9), thus confirming J. Blischke's statement that the position of pins discovered inside the tombs from Tápé must not be generalized to other cases<sup>16</sup>.

Specialized literature records numerous discussions on the possible use of such pins: as accessories of the funerary garb, fixtures of the shroud, or items used by the living as well, for certain ceremonial costumes<sup>17</sup>.

<sup>15</sup> Due to the state of preservation of the bones, one cannot decide on which shoulder the pin was placed.

<sup>16</sup> BLISCHKE 2002, p. 63.

<sup>17</sup> For a synthetic presentation of these discussions and a discussion of the topic see BLISCHKE 2002, p. 59–63.

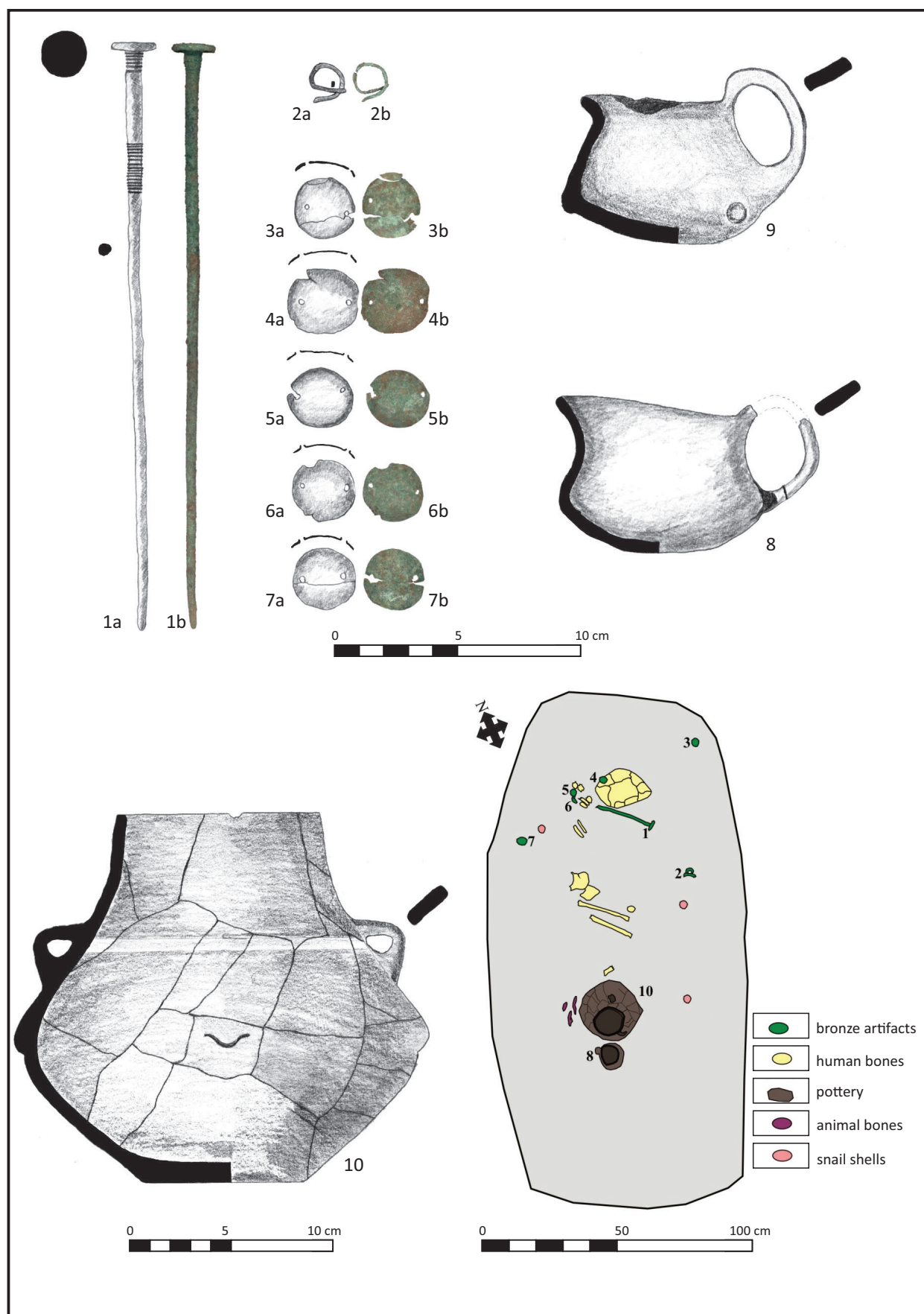


Fig. 5. The funerary inventory of tomb Cx\_004 in Pecica "Site 14".

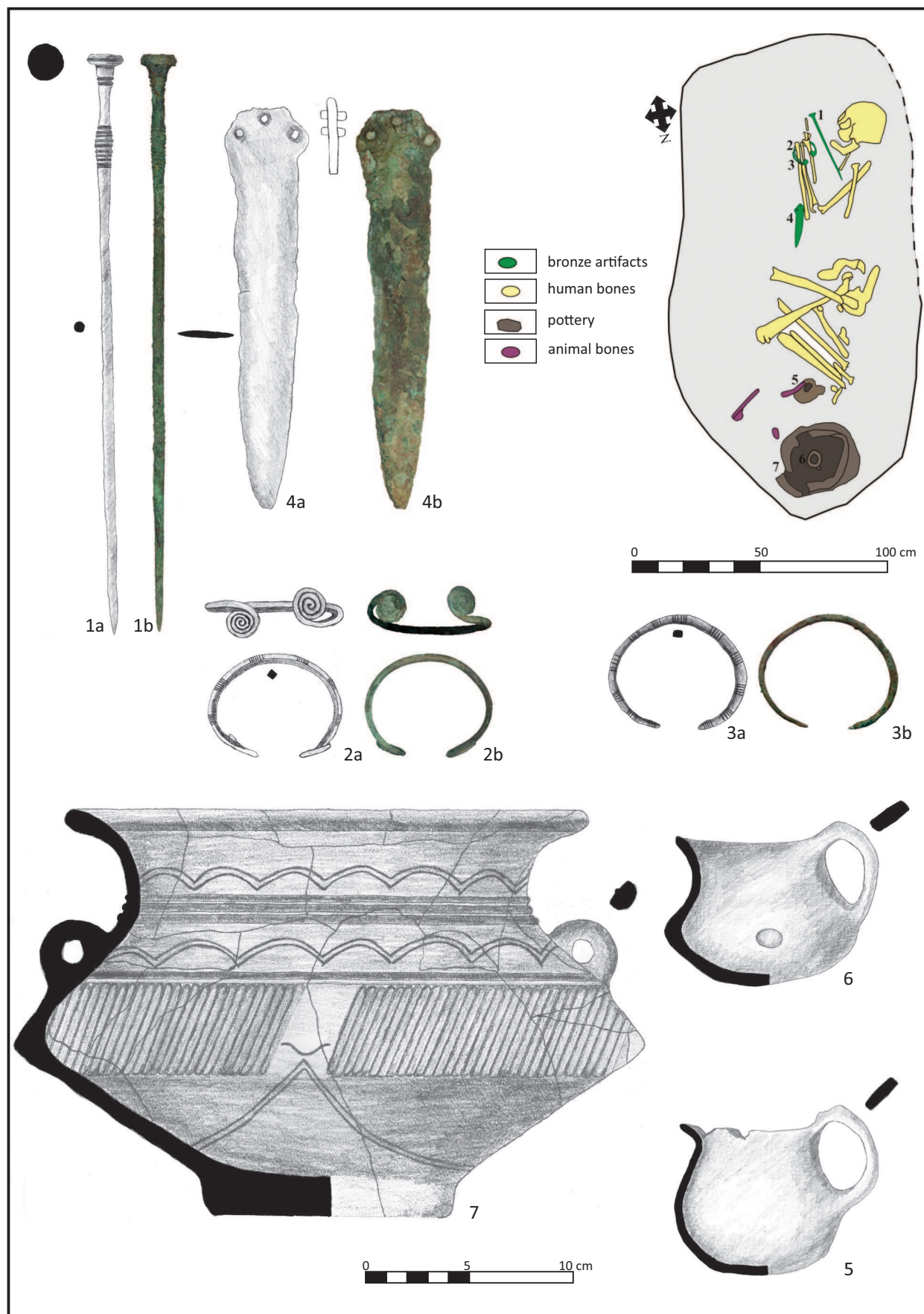


Fig. 6. The funerary inventory of tomb Cx\_098 in Pecica "Site 14".

Due to both the topic and extension of this article we are unable to discuss in detail the above mentioned opinions, thus we shall only observe that no matter if the pins were employed as accessories of funerary or ceremonial garbs or if they fixed the shroud, such items are rarely present in tombs.

The seal-headed pin (Nadel mit Petschaftkopf) is found in Central Europe, in areas such as Bohemia, Southern Moravia and Northern Austria, but, also, in regions such as South-Western Slovakia, Northern and Eastern Hungary<sup>18</sup>, Northern Voivodina and the Lower Mureş. F. Innerhofer's analysis indicates that such pins were employed by both men and women, but more often by the latter<sup>19</sup>.

Four tombs with bronze pins were discovered in the cemetery from Pecica (Cx\_004, Cx\_067, Cx\_092, and Cx\_098). As for their funerary inventory, all these tombs can be considered as "rich" when compared to the other identified graves; Cx\_004 contained five appliques, one loop, one pin, one pot and two small cups (Fig. 7); Cx\_067 contained a dagger, a bracelet, a pin, a pot and a small cup (Fig. 17); Cx\_092 contained an axe, a pin, a pot and a small cup (Fig. 18), while Cx\_098 contained two bracelets, a dagger, a pin, a bi-trunk-shaped pot and two small cups (Fig. 8). According to the anthropological analysis performed on the skeletons, one could observe that tombs Cx\_067, Cx\_092 and Cx\_098 belonged to adult males, while Cx\_004 belonged to a child.

In the cemetery of Tápé, out of the 687 tombs<sup>20</sup>, pins were part of the inventory of 25. Among these pins, 16 are seal-headed pins, while the rest belong to other types. Some of the seal-headed pins were found in pairs (in tombs 37, 65, 322, 423, and 684), a situation never encountered among the graves excavated in the cemetery from Pecica. It is worth mentioning that in the cemetery from Tápé most tombs containing seal-headed pins belonged to females; this could be noted in the case of 13 out of the 16 tombs that contained such items.

Besides the cemeteries in Tápé and Pecica "Site 14", where seal-headed pins were found, one can also mention other sites in the Lower Mureş area with similar discoveries, namely Pecica, the so-called bronze deposit I<sup>21</sup> and Felnac<sup>22</sup>. Both were published as deposits despite of the fact that they were found by chance and in unclear contexts. In the case of Felnac, both metal items and entirely preserved items of



Fig. 7. Tomb Cx\_004 in Pecica "Site 14".



Fig. 8. Tomb Cx\_098 in Pecica "Site 14".

<sup>18</sup> INNERHOFER 2000, p. 143, Karten 42, 43.

<sup>19</sup> INNERHOFER 2000, p. 143, note 634.

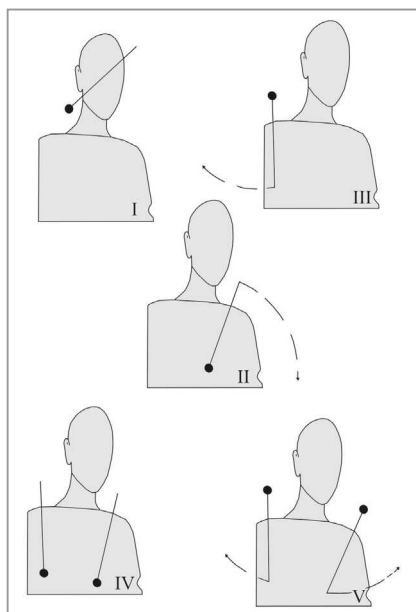
<sup>20</sup> TROGMAYER 1975.

<sup>21</sup> PETRESCU-DÎMBOVIȚA 1977, Pl. 6/8; DAVID 2002, Taf. 134/9.

<sup>22</sup> PETRESCU-DÎMBOVIȚA 1977, Pl. 142/13, 14; KACSÓ 1992, p. 97.

pottery indicate the existence of a cemetery and not of a deposit; C. Kacsó<sup>23</sup> and I. Bejinariu<sup>24</sup> shared similar opinions. In this context one can also mention two seal-headed pins discovered as stray finds in Kiskundorozsma<sup>25</sup>; these two pins might have originally been part of the inventory of tombs<sup>26</sup>.

The above mentioned data make us believe that the pins, especially the seal-headed ones, that are usually associated with the “rich inventories”, can aid, besides other artefacts, in the identification of the deceased that once enjoyed a special social status. One must still mention that this hypothesis must not be extrapolated to a wide geographical area. At this stage of research, all that can be stated with a high degree of certainty is that inside the cemetery in Pecica “Site 14” some of the “rich” tombs contained seal-headed and other types of pins and thus it can be safely inferred that the seal-headed pins at Pecica “Sit 14” cemetery can represent an indicator of elevated social status.



**Fig. 9.** The position of the pins in relation to the deceased from Tápé (after BLISCHKE 2002).



**Fig. 10.** Detail of the skull in tomb Cx\_004.

## ANTHROPOLOGICAL ANALYSIS

**Cx\_004:** This skeleton's cranium was the best preserved bone element, but due to soil erosions it could not be reconstructed. The viscerocranium is completely missing. Several parts of the postcranial skeleton were preserved: two fragments from the left shoulder blade, three rib fragments, and two articulation fragments from the spine which was not recovered from the layer. The right iliac wing was recovered from the pelvis, while the left iliac wing was 50% destroyed in the laying context. Only the femurs were recovered from the bones of the lower limbs; the distal epiphysis of the right femur is partially destroyed, while only two fragments of diaphysis were recovered from the left femur.

Due to the rather poor state of preservation and representativity of the skeleton, establishing the gender of the deceased proved impossible, while for establishing the age of death, the only indicator was the length of the right femur. Since it was preserved to a degree of 90%, one could estimate the bone's length to 300 mm, thus the deceased might have been 7–8 years old<sup>27</sup>.

<sup>23</sup> KACSÓ 1992.

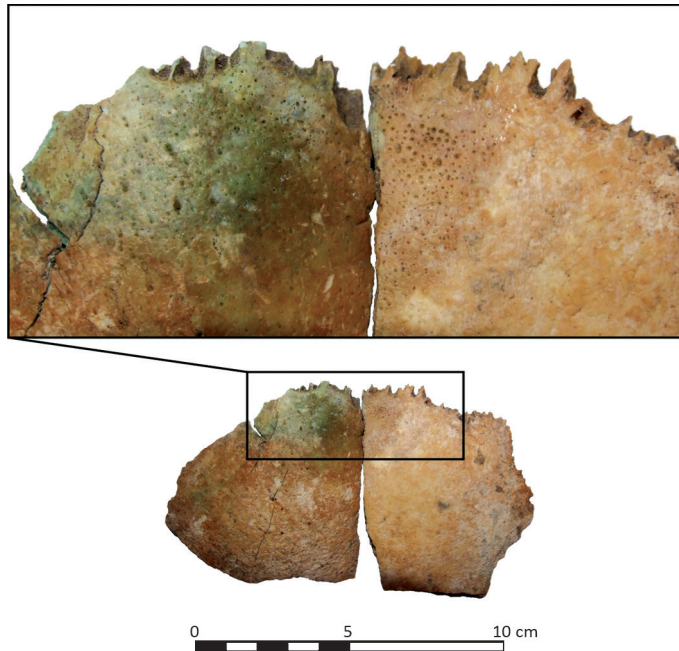
<sup>24</sup> BEJINARIU 2003.

<sup>25</sup> FOLTINY 1957, Taf. IX/1; XI/5.

<sup>26</sup> FOLTINY 1957, p. 36–41. The pins were found in different locations, in Kiskundorozsma “Öreghegy” and “Kálmán Oláh's field”.

<sup>27</sup> SCHEUER, BLACK 2000, p. 394.

On the surface of the parietal bone, near the *lambdoid suture*, **one can note a pathology called *cribra cranii*** (Fig. 11). This type of lesion appears on the outer surface of the cranium (usually on the parietal bone) and takes the form of porosities<sup>28</sup>. While infectious and metabolic diseases can trigger the formation of *cribra cranii*, anemia was identified in specialized works as the most likely cause<sup>29</sup>.



**Fig. 11.** Presence of *cribra Cranii* on the parietal bone.

**Cx\_098:** The skeleton is in a rather poor state of preservation and representation, especially the shoulder girdle, the pelvic girdle, but also the bones of the thorax. Fragments from the frontal bone and the left parietal bone were recovered from the cranium, while the viscerocranium was only represented by the left half of the mandible and the left zygomatic bone.

Both cranium and postcranium characteristics indicate without a doubt that the individual was an adult male. The gabela reached development stage 4, while the supraorbital margins are typical to stage 3<sup>30</sup>. The sciatic incisura is narrow and the central arch is missing<sup>31</sup>.

Due to the skeleton's precarious state of preservation and representativity, the only indicator for age is the auricular surface of the ilium that displays an even granularity, and is typical to development stage IV<sup>32</sup>. Thus the individual was an adult, probably deceased between 35 and 39 years of age.

In order to calculate the individual's height we were only able to employ the maximum length of the left tibia, the only entirely preserved long bone. The maximum length of the tibia is 380 mm and thus the man's height, calculated according to Pearson's formulae<sup>33</sup> is of 169.1 cm; according to Martin's recommendations<sup>34</sup>, the individual could be included in the category of people of supra-average height.

The pathological picture is rather diverse. Hypoplasia lines could be noted on incisive 2 and the canine on the left half-arch of the mandible (Fig. 12/1a, 1b). As for this pathology's etiology, several risk factors have been suggested, among which the hemolytic disease of the newly born (destruction of red globules in the blood), premature birth, major feverish infections, vitamins A, C, and D deficiencies, hypoxia (the newly born's lack of air during birth) and others. Nevertheless, the most frequent cause is sub nutrition<sup>35</sup>.

<sup>28</sup> ORTNER, PUTSCHAR 1985, p. 58.

<sup>29</sup> ORTNER, PUTSCHAR 1985, p. 259.

<sup>30</sup> BUIKSTRA, UBELAKER 1994, p. 20.

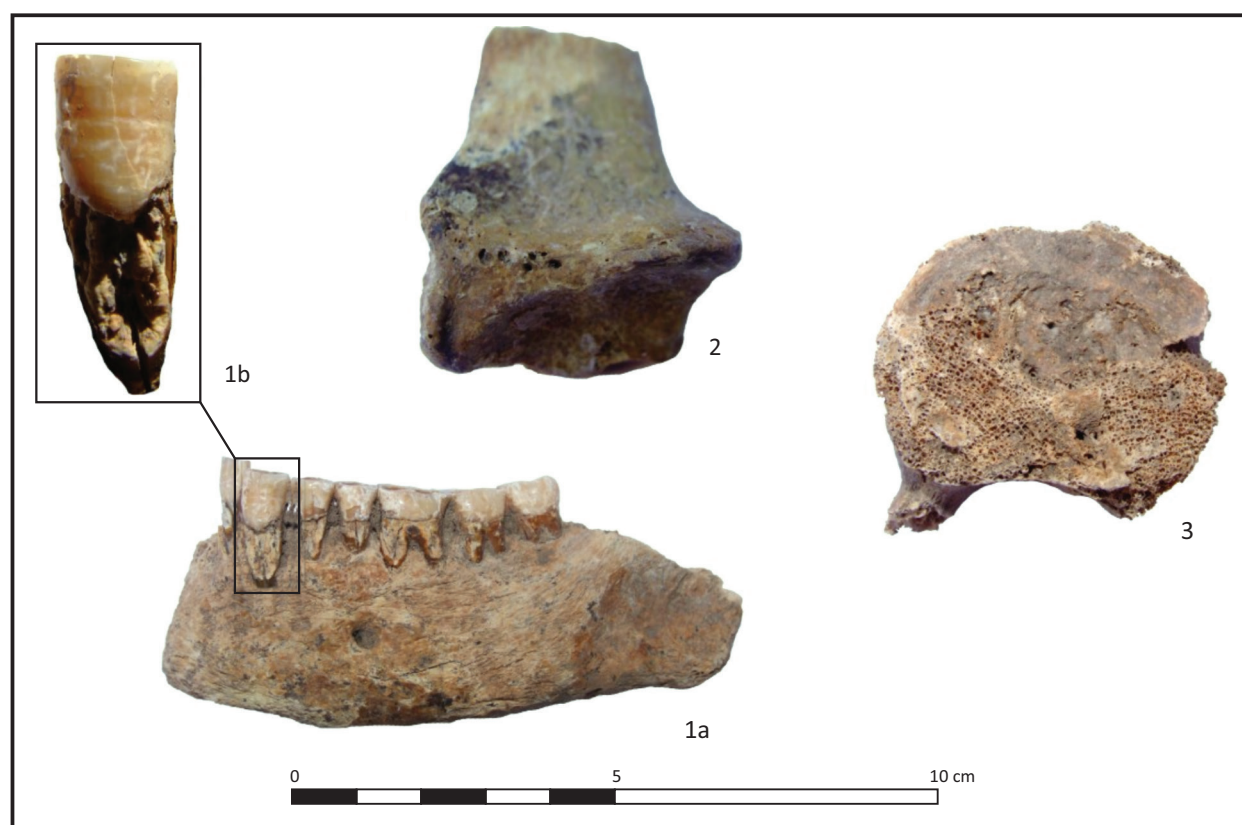
<sup>31</sup> BUIKSTRA, UBELAKER 1994, p. 17.

<sup>32</sup> WHITE, FOLKENS 2005, p. 382.

<sup>33</sup> OLIVIER 1960, p. 263.

<sup>34</sup> MARTIN 1914, p. 208.

<sup>35</sup> AUFDAHEIDE, RODRIGUEZ MARTIN 1998, p. 407.



**Fig. 12.** 1a. Enamel hypoplasia on mandibular incisors and canines; 1b. Enamel hypoplasia on the left mandibular canine; 2. Osteoarthritis of the distal epiphysis of the radius; 3. The presence of Schmorl nodules on the upper surface of the lumbar vertebra.

Another interesting fact from this individual's past is suggested by the presence of several modifications in the insertion area of certain muscles and tendons, changes known as enthesopathies. Their location and size provides clues to his daily activities that involved and strained certain groups of muscles<sup>36</sup>. Unfortunately, due to the skeleton's poor state of preservation (especially of the epiphyses of the long bones), such pathologic modifications were only noted in the case of a small number of bones. Thus, on the bones of the arms one could note certain modifications in the shape of bone crests and eroded parts in the insertion point of the following muscles: *Deltoid*, *Pectoralis major* and *Latissimus dorsi*, connected to the humerus (Fig. 13/1a, 1b, 1c; 13/2a, 2b).

The *Pectoralis major* muscle is involved in movements of rotation and adduction, accompanied by the flexion of the arm<sup>37</sup>. The development of deltoid tuberosity can be explained as the bone's reaction to constant exercise consisting of circular movements and the adduction of the arms above the head<sup>38</sup>. Among the aborigines from the Canary Islands, this pathological condition was associated to the repeated use of a weapon called the "banot" that was employed in throwing stones. In the same time, such modification of the *Deltoid* muscle are not only the result of a repeated movement intended to throw objects, but can also develop from the use of some instrument during close contact fights or during household and animal husbandry activities<sup>39</sup>.

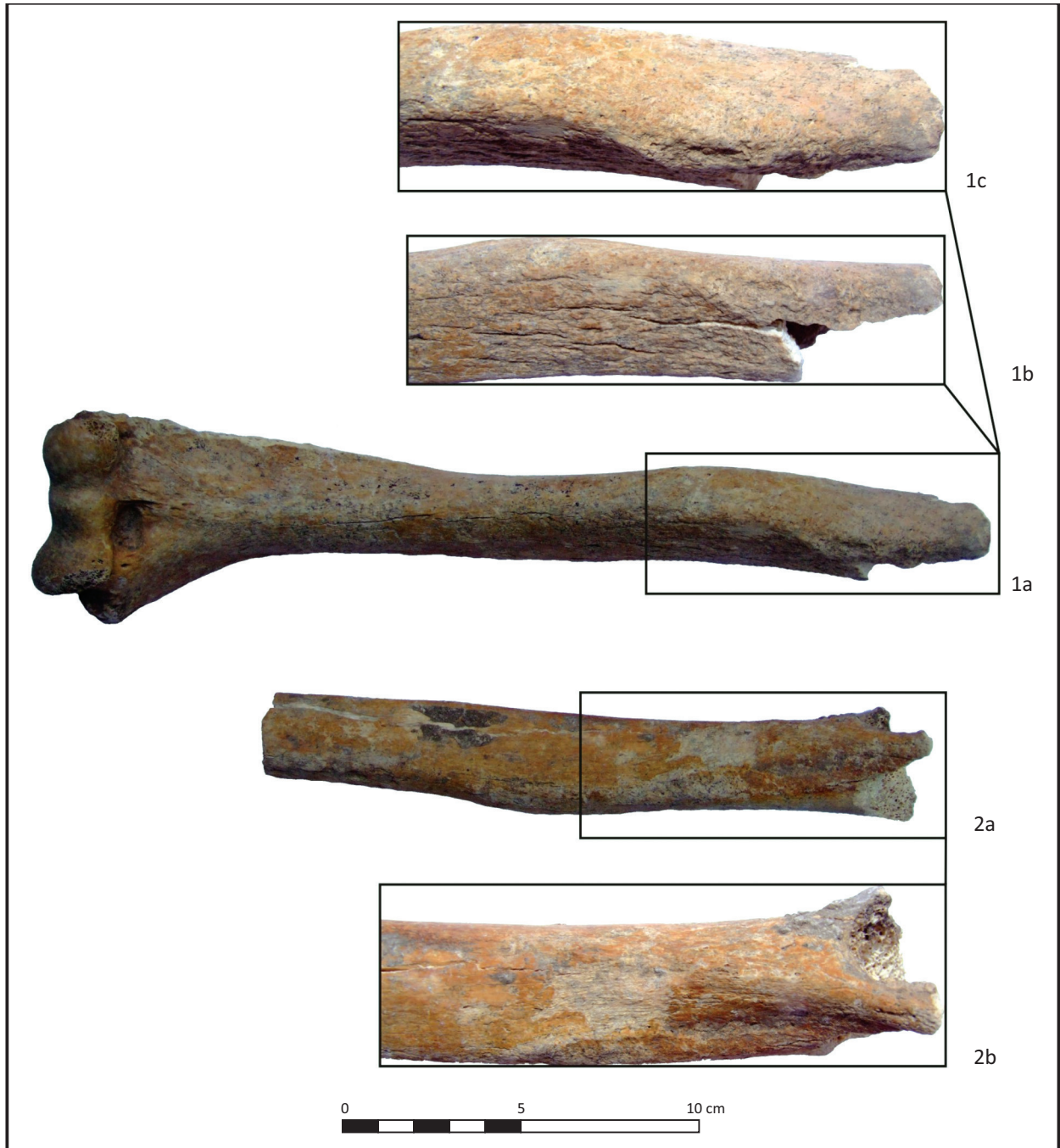
At forearm level, due to the poor state of preservation of the epiphyses, one could only note osteoporosis on the distal epiphysis of the right radius (Fig. 12/2). This type of pathological modification was also identified at the level of the bones corresponding to the lower limbs, i.e. on the distal epiphysis of the left femur (that of the right femur has been destroyed) (Fig. 14/1) and on the proximal epiphysis of the tibia, on the left side (Fig. 14/2).

<sup>36</sup> LARSEN 1997, p. 188.

<sup>37</sup> GONZALÉZ, CONCEPCIÓN 2004, p. 186.

<sup>38</sup> GONZALÉZ, CONCEPCIÓN 2004, p. 189.

<sup>39</sup> GONZALÉZ, CONCEPCIÓN 2004, p. 190.



**Fig. 13.** 1a, 1b, 1c. The presence of enthesopathies on the right humerus; 2a, 2b. The presence of enthesopathies on the left humerus.

The main factor that contributes to the onset of osteoarthritis is mechanical stress and physical activity. Some activities that involve manual labor, such as performed by farmers, ballet dancers, various types of athletes and those that perform rigorous physical exercises can lead to such modifications of the articulations<sup>40</sup>.

Another cause that can generate the onset of this pathology on the level of the knee articulation can be long and frequent walking, but also standing<sup>41</sup>.

The fact that this individual submitted to rather intense physical effort during his lifetime is also demonstrated by the formation of the so-called Schmorl nodules on the upper and lower surface of the lumbar vertebrae (Fig. 12/3). This pathology can be the result of physical exercise

<sup>40</sup> LARSEN 1997, p. 163–164.

<sup>41</sup> GONZALÉZ, CONCEPCIÓN 2004, p. 336.

involving the flexion and bending of the spine, but could have also formed through trauma caused by lifting certain weights<sup>42</sup>.

The general outlook of this individual's bones indicates a rather robust man. On the posterior surface of the femoral diaphysis one can note the strong contours of the rough line (Fig. 14/ 3a, 3b).



**Fig. 14.** 1. The osteoarthrosis of the distal epiphysis on the left femur; 2. The osteoarthrosis of the proximal epiphysis on the left tibia; 3a, 3b. The strongly marked rough line on the left femur.

In order to interpret as exactly as possible these bone modifications, we also took into account the general situation of this individual. The causes for the onset of enthesopathies can be diverse, ranging from domestic activities to intense physical exercise in the case of warriors. Due to the general constitution of this man, his stature at the upper limit for that period, his robust bones, correlated with the archaeological proof (he was interred together with a dagger), one can presume that these enthesopathies present on the bones can be the result of an intense warrior-like activity he once engaged in.

A similar case was encountered in Toppo Daguzzo and Madonna di Loreto<sup>43</sup>, where several Bronze Age skeletons were discovered; following anthropological investigations it has been noted that those bones displayed various enthesopathies on their surface, both on the upper and lower limbs (enthesopathies also identified on the individual from Pecica). As in our case, all men showing those bone modifications were interred with various weapons. In their case it has also been presumed that the skeletons belonged to warriors.

As for the general state of the two skeletons, one can hypothesize that in both cases the nutritional status was problematic, at least during childhood. This fact is supported by the presence of hypoplasia lines on the teeth of the adult individual, but also the onset of *cribra cranii* on the surface of the child's parietal bone. The situation improved during subsequent periods, at least for the adult individual whose stature was at the upper limit for that period and who developed robust bones.

<sup>42</sup> GONZALÉZ, CONCEPCIÓN 2004, p. 259.

<sup>43</sup> CANCI 1998.

## THE CHRONOLOGICAL SETTING

The final stage of the Bronze Age starts in the area under analysis with the first tumular manifestations, thus during Bronze B2-C, and continued throughout stages BD, HA1<sup>44</sup> and, probably, lasted until stage HB1<sup>45</sup>. During the present article, the analysis extends through Bronze Age stages B2-C and BD-HA1. The selection of these two stages was inspired by new research performed between 2009 and 2011, but also by certain reinterpretations of older discoveries.

The cemetery in Felnac was discovered by chance during the erection of the zootechnical complex in 1971. On the basis of metal items and pottery found there one can estimate the fact that the necropolis was used for a long period, from stage B2-C until stage BD<sup>46</sup>. A multi-stratigraphic settlement was identified and tested several dozens of meters north of the cemetery. Besides the Gornea-Kalakača discoveries, those dated to the third-fourth, eleventh-thirteenth, and fifteenth-sixteenth centuries, specialists have also identified several pottery fragments that date to Bronze Age stage BD-HA1<sup>47</sup>. Preserved documentation indicates that the deposition level that corresponded to the Late Bronze Age settlement was disturbed by later habitations; a single pit that belongs to this settlement, dug in the yellow clay, was documented during the 1975 – 1978 excavation.

Another case in which the entire mentioned sequence (B2-C and BD-HA1) was identified is the settlement of Şagu “Site A1\_1”. The settlement, comprising 306 features, extends over a length of 530 m and an approximate width of 450 m, over an area of cca. 238,500 m<sup>2</sup> (23.85 ha). On the basis of ceramic discoveries, but also of the few bronze objects, one can note that the settlement was established during stage B2-C and developed during the entire Late Bronze Age, reaching a peak during stage HA1<sup>48</sup>. The entire above mentioned chronological sequence was also identified in the case of the cemetery from Pecica “Site 14”<sup>49</sup>. Another example that must be mentioned refers to the two settlements from Tápé-Kemeneshát and Tápé-Szőlőföldek that were used for long periods, just like the sites mentioned above; one can state that the two settlements were in use during stages BC, BD-HA1<sup>50</sup>.

Due to the above mentioned data, we believe that the two stages B2-C and BD-HA1 can be distinguished through a series of elements that can be identified in the field of material culture. The first such element is the predominant burial rite employed during each stage; inhumation predominated during the first chronological horizon, while incineration was preferred during the second<sup>51</sup>. Another difference can be noted in relation to the funerary inventories, richer and including larger objects in the first stage. The evolutive process can be followed less clearly inside the settlements since the only such site excavated entirely is the one from Şagu; some differences can be nevertheless found; among them we would like to mention the increased number of depositions during the second stage (BD-HA1), mainly during its final period (HA1), when the settlement was enlarged. Fortified

<sup>44</sup> GUMĂ 1993, p. 150; GUMĂ 1997, p. 53; GOGÂLTAN 1993; GOGÂLTAN 1996; GOGÂLTAN 1998, p. 184.

<sup>45</sup> SZABÓ 2004a.

<sup>46</sup> KACSÓ 1992.

<sup>47</sup> SAVA 2011, p. 83–84.

<sup>48</sup> SAVA ET AL 2011.

<sup>49</sup> GOGÂLTAN, SAVA 2012, note 69.

<sup>50</sup> SZABÓ 2004b, p. 152; SÁNTA 2010, p. 521.

<sup>51</sup> Some incineration graves were also found in the cemeteries in use during stage B2-C in Tápé, where inhumation was the predominant rite; out of the 687 tombs, 36 were incineration tombs; for the same stage one can mention the cemetery in Felnac “The Zootechnical Complex”; despite the fact that it was a stray discovery and though no clear context is available, one can state on the basis of recovered artefacts that most of the bronze objects were part of the inventory of inhumation tombs; one can also mention there an urn (preserved in the collection of the History and Archaeology County Museum Maramureş, Inv. No. 836A; I thank again Dr. Dan Pop for the information) similar to those from Tápé, thus suggesting the fact that both funerary rituals were performed in this cemetery. For stage BD-HA1 we would like to mention the cemetery in Sântana “Cetatea Veche”, where several inhumation graves and two incineration graves were discovered, starting with 1888, in front of fortification no. 1; during this stage, the other incineration cemeteries discovered did not include any inhumation graves.

settlements appeared during the second stage and bronze deposits become more numerous than ever before.

From a chronological perspective, seal-headed pins can be found during the middle and early stage of tumular-type discoveries<sup>52</sup>, therefore the two items discovered in the tombs from Pecica “Site 14” (Fig. 5/1; 6/1) are very good chronological indicators. The appliqués (buttons) discovered in grave Cx\_004 (Fig. 5/3–7) are part of a category of artefacts with wide distribution throughout the Bronze Age and therefore hold no chronological value<sup>53</sup>; the same is true for the loop discovered inside the same tomb (Fig. 5/2). The bracelet made of a rectangular bar with rounded corners (Fig. 6/3), discovered in grave Cx\_098 is of a type largely encountered throughout the Late Bronze Age<sup>54</sup>, but it also featured in tumular contexts<sup>55</sup>. The spiral-ended bracelet (Fig. 6/2) is a good indicator for the dating of stage B2-C, just like the dagger (Fig. 6/4) discovered in the same tomb<sup>56</sup>. As for the pottery, the pot (Fig. 5/10) found in grave Cx\_004 and the four small cups (Fig. 5/8, 9; 6/5–6) from both tombs represent discoveries typical to tumuli contexts<sup>57</sup>. The bi-trunk-shaped vessel (Fig. 6/7) from tomb Cx\_098 displays certain traits different from those of recipients discovered in the cemetery from Pecica and those in the Lower Mureș. The analogies closest in shape can be found in the Central-Northern part of Hungary, in the Piliny<sup>58</sup> cultural milieu; the central area decorated with protuberances and grooves can be typical to the Piliny milieu, while the stylized arches incised on the recipient’s neck have good analogies in the Lower Mureș area and in the north of Banat<sup>59</sup>. In conclusion, the funerary inventories discovered together with the two skeletons are typical to stage B2-C.

## SOCIAL IDENTITY IN THE LOWER MUREȘ VALLEY

In order to typologize and, then, understand the social mechanisms typical to the Late Bronze Age in the Lower Mureș, we intend to employ R. H. McGuire’s model stating that each culture is characterized by three social units: individual, group and settlement<sup>60</sup>. The three above mentioned social units can be identified through archaeological research; thus, the status of each individual inside a community can be identified by comparing funerary inventories; the group can be defined as “a smaller individual community group” and the traced archaeologically by the similarity among certain funerary inventories but also by the identification of buildings with special function (workshops or public, religious, administrative buildings); the social and possibly also the political organization of a settlement of group of settlements can be researched through a series of their micro and macro structural characteristics<sup>61</sup>.

As previously mentioned, at the level of the individual, status and wealth can be identified archaeologically by comparing different funerary inventories. As case studies we have selected the cemeteries in Pecica “Site 14” and Tápé, both located along the Lower Mureș. Naturally, the two

<sup>52</sup> NOVOTNÁ 1980, 73; p. INNERHOFER 2000, p. 144–145.

<sup>53</sup> GOGÂLTAN 1999a, p. 173–174.

<sup>54</sup> NAGY 2005, p. 14.

<sup>55</sup> KOVÁCS 1975, p. 45.

<sup>56</sup> KOVÁCS 1975, p. 45.

<sup>57</sup> The pottery from Tápé represents the closest analogy for the above mentioned pots from Pecica; on the issue see TROGMAYER 1975.

<sup>58</sup> KEMENCZEI 1984, Taf. I/22; VII/26; XI/5. Similar pots were found in the incineration cemeteries from Kozárd, Litke, and Jászberény “Cserőhalom”.

<sup>59</sup> Giroc “Mescal” (SZENTMIKLOSI 2009, pl. LXVII/1–2, 6, 8; LXVIII/6–9 ; LXXIII/4; LXXIV/10), Sântana “Cetatea Veche” (GOGÂLTAN, SAVA 2010, fig. 37), Șagu “Site A1\_1” (SAVA ET AL 2011, Fig. 147; 178; 180) and Felnac “Complexul Zootehnic”. The decoration consisting of arches placed in rows featured in the Lower Mureș since the Middle Bronze Age, as typical to Vatina/Cornești-Crvenka-type pottery. These were found in Socodor (GOGÂLTAN 1999b), Satu Mare (GOGÂLTAN 2004), Macea (SAVA 2009), and Sântana “Tell nordic”. The decoration, so typical to Cornești-Crvenka or Vatina pottery was employed until the end of the Bronze Age.

<sup>60</sup> MCGUIRE 1983.

<sup>61</sup> For a wider discussion of the issue see COSMOPOULOS 1995.

necropolises differ from the perspective of the number of uncovered tombs, 37 (out of which 23 were inhumation burials) in Pecica and 687 in Tápé, but they are the only cemeteries in the area under research on which such an analysis can be performed.

Among the tombs uncovered in Pecica one can note that there are six containing the most numerous items of inventory, such as associations between bracelets, pins, weapons, amber beads, pots and small cups. Three of them belong to adult males, all buried with weapons, two with daggers, Cx\_067 (Fig. 17) and Cx\_098 (Fig. 6; 8) and one with an axe, Cx\_92 (Fig. 18). One must also mention that enthesopathies, corresponding to bone modifications typical to individuals who use weapons over prolonged periods, were identified on all three skeletons<sup>62</sup>. If one takes into consideration the anthropological characteristics of these skeletons and their funerary inventory that includes weapons, we believe that these individuals can be considered to have been warriors. The rich inventories discovered inside these tombs are another proof of the special social status that warriors enjoyed during the Late Bronze Age<sup>63</sup>. The other three tombs belong to children, who were also buried with “rich” funerary inventories, as compared to others; the tomb conventionally labeled Cx\_99 included as funerary inventory five bronze appliqués, ten amber beads, a pot and a small cup (Fig. 19); tomb Cx\_102 included two bracelets, three appliqués, one pendant and one small cup (Fig. 20), while Cx\_004 was already discussed in this article (Fig. 5; 7).

One can infer, on the social structure of the community whose members have been entered in this cemetery, that warriors played a significant, if not the most significant role. All were adult males. Another observation refers to the fact that wealth was inherited, as indicated by the fact that three out of the six “rich” tombs belong to children.

| Site/Grave | Age      | Sex |
|------------|----------|-----|
| Pecica/004 | Inf. II  | F   |
| Pecica/067 | Mature   | M   |
| Pecica/092 | Mature   | M   |
| Pecica/098 | Mature   | M   |
| Pecica/099 | Inf. II? | ?   |
| Pecica/102 | Inf. II? | ?   |
| Tápé/25    | Adult    | F   |
| Tápé/73    | Adult    | F   |
| Tápé/130   | Senile   | F   |
| Tápé/132   | Adult?   | F   |
| Tápé/226   | Mature   | M   |
| Tápé/240   | ?        | F   |
| Tápé/252   | Mature   | M   |
| Tápé/285   | Adult    | F   |
| Tápé/324   | Adult    | F   |
| Tápé/326   | Inf. II  | ?   |
| Tápé/329   | ?        | M   |
| Tápé/342   | Mature   | F   |
| Tápé/423   | Adult    | F   |
| Tápé/444   | Mature   | F   |
| Tápé/500   | Adult    | F   |
| Tápé/517   | Mature   | M   |
| Tápé/518   | ?        | M   |
| Tápé/526   | Adult    | F   |
| Tápé/656   | Adult    | F   |

**Fig. 15.** “Rich” tombs from the cemeteries in Pecica and Tápé.

<sup>62</sup> For this, see the anthropological analysis performed in the case of Bronze Age cemeteries in Toppo Daguzzo and Madonna di Loreto, in Italy, where similar cases were encountered (CANCI 1998).

<sup>63</sup> All evidence on war and warriors in the Lower Mureş was recently collected in GOGÂLTAN, SAVA 2012. For the role of warriors during the Bronze Age see BREUER 1990; OSGOOD 1998, p. 85–90; KRISTIANSEN 1999; OSGOOD ET AL 2000; HARDING 2000, p. 271–307; KRISTIANSEN, LARSEN 2005, p. 142–250; HARDING 2007; KRISTIANSEN 2011.

In the cemetery of Tápé, out of the 687 tombs, 19 contained funerary inventories that can be considered as being “rich”<sup>64</sup> (Fig. 15). Most of them belonged to women (14 cases), seven adult, two mature, one infant II and one older than 60; five tombs belonged to men three mature, two whose age cannot be determined. Out of all the deceased one notes that the number of men and women is almost equal (the first slightly more numerous); in this context we can mention the increased frequency of infantile mortality (135 individuals) and of adult female mortality (90 individuals); also, there are only 14 individuals who died older than 60 (Fig. 16). As for the social status of individuals interred in this cemetery, one can mention the fact that women played a significant, if not the most significant role, mainly adult ones, since among the tombs with “rich” inventory two were of mature women and one of a woman older than 60<sup>65</sup>. Men’s tombs, though more numerous than those of women, are a minority among those with “rich” inventory. Unlike the cemetery of Pecica, where the richest tombs belonged to warriors (mature men), only two graves containing weapons (283, 534) have been unearthed in Tápé<sup>66</sup>. Among children (infants I and II), a large number of tombs included poor inventories, consisting of one small cup or one pot, maybe a bracelet or a pendant; nevertheless, one can mention certain tombs with “rich” inventory, among which nos. 180 and 216, that belonged to boys aged between 7 and 14, but also tombs 280 and 352. The child’s tomb with the richest inventory in this cemetery, no. 326, probably is that of a juvenile girl (aged between 15 and 20). Among the defunct over 60 most are women, some do not include an inventory, some contain one pot, one small cup, a pin or a bracelet; among them, only the grave of a woman included a “richer” inventory (130). Since one or two “rich” tombs belonged to children or old persons, one can note that wealth and, maybe, also status was preserved throughout life and was even inherited.

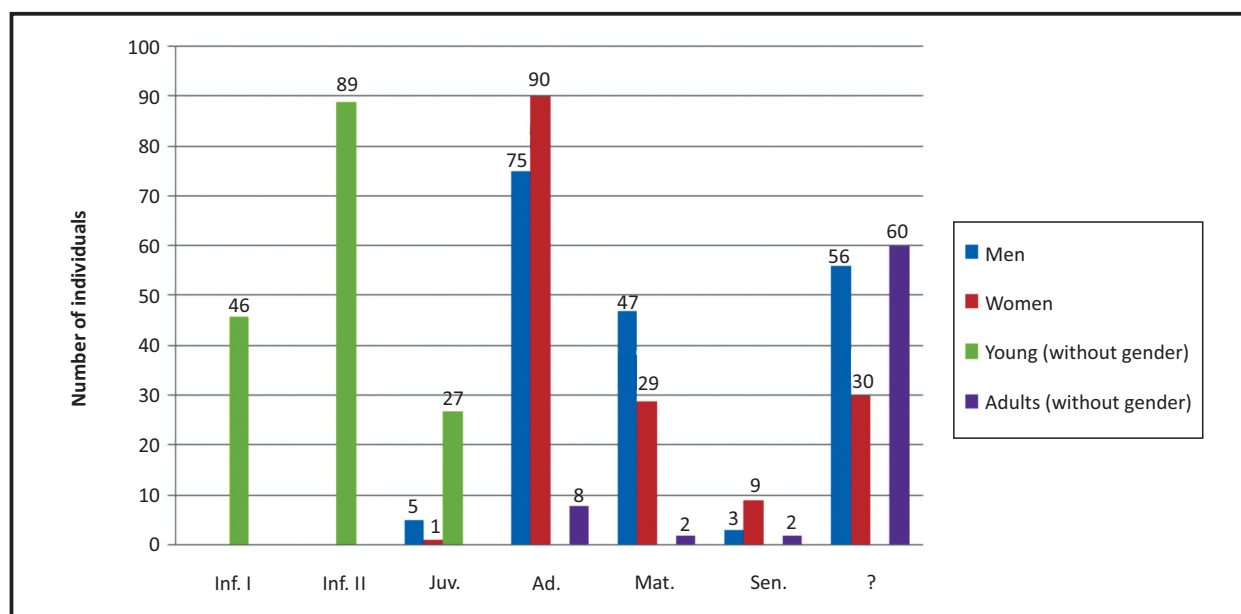
Though located just 70 km apart, the cemeteries in Pecica and Tápé provide a very different perspective on the social status of the members of those respective communities. If in Pecica warriors were given special significance, it seems that Tápé adult women enjoyed higher status. It is possible that the cemetery uncovered in Szentes, also reflects a view on social status of community members similar to Pecica<sup>67</sup>. These cemeteries of the B2-C chronological horizon suggest a society hierarchically structured according to wealth, but one must also take into consideration the peculiarities of each area. Therefore, from a methodological perspective, the specificity of one site cannot be extrapolated to a wider area and thus statements on social aspects of communities in the Lower Mureș must be confirmed by archaeological excavations.

<sup>64</sup> In this case, we considered as rich those tombs that contained a significant role of artifacts without practical role, mainly jewelry items (bracelets, pendants, finger rings etc.). See an exhaustive analysis of this cemetery in BLISCHKE 2002, p. 51–154. In this work, J. Blischke remains unconvinced on the reconstruction of social hierarchy in the community from Tápé; nevertheless, he mentions four groups, identified on the basis of associations between artifacts (BLISCHKE 2002, p. 153); the first group includes women buried with bronze pins and girdles (tombs 73 and 132), another group of tombs shares the association of more than three pendants (tombs 25, 73, 130, 192, 342, 444), another reunites women’s tombs that contain simple finger rings or rings with spiralled ends (25, 73, 123, 252, 280, 301, 302, 326, 327, 423, 444, 518, 526, 527, 656), while the last group of tombs consists of those that contained as funerary inventory amulets and numerous animal bones (tombs 348, 412, 472, 500, 544, 627).

<sup>65</sup> Other cases of women playing a more important role than men are mentioned in specialized literature, see REGA 1997; PALINCAȘ 2010.

<sup>66</sup> The two tombs had, as funerary inventory, one dagger and one small cup or an appliqué each. In the cemetery of Tápé one can also find tombs containing weapons: arrowheads and knife blades; they cannot be included in the category of “warriors” tombs because a bronze arrow head was found in grave no. 26 that belonged to a woman, placed between her right arm and the thorax; two bronze arrowheads were discovered in tomb no. 307 that belonged to a man, but they were both inserted in the vertebrae; another example is the skeleton in grave no. 508, which had an arrowhead near the atlas bone. These examples, most probably, indicate individuals who died from arrow wounds. One can also mention four other tombs (123, 136, 248, 433) that cannot be listed among the graves with weapons just because they included one knife blade each besides other items of funerary inventory (according to their shape, these knives were probably used for household activities).

<sup>67</sup> The cemetery in Szentes was uncovered to a small degree between 1929 and 1930; the excavation also led to the identification of a few “rich” tombs (2, 33a, 49). Weapons that, probably, originated in “warriors” tombs were accidentally discovered in the close vicinity of the researched area (two daggers and one celt). For more details on this archaeological site see NAGY 2005.



**Fig. 16.** Distribution of individuals according to age and gender in the cemetery of Tápé (taken from TROGMAYER 1975).



**Fig. 17.** Tomb Cx\_067 in Pecica "Site 14".



**Fig. 18.** Tomb Cx\_092 in Pecica "Site 14".



**Fig. 19.** Tomb Cx\_099 in Pecica "Site 14".



**Fig. 20.** Tomb Cx\_102 in Pecica "Site 14".

Scarce data is available on funerary discoveries for the subsequent stage of the Late Bronze Age in the Lower Mureș, i.e. for the BD-HA1. Thirteen incineration tombs were found in Pecica “Site 14”, with the ashes placed in urns and funerary inventories that most often included small bronze items, rings, beads, bracelets etc. Another cemetery from this period is that in Felnac, which was still in use during stage BD, but no more than that is known due to the lack of archaeological research<sup>68</sup>. A small incineration cemetery was found on the belt road of Arad and researched in 2010<sup>69</sup>, while another, consisting of four cremation tombs was identified near the town of Pecica, on the future section of the Arad-Nădlac highway<sup>70</sup>. The different excavations performed in Sântana “Cetatea Veche” have revealed a small part of the cemetery that was probably contemporary to the fortification labelled 1. Taking into consideration the fact that the clay lenses that form the earthen rampart of enclosure 3 contained two incineration tombs (Cx\_05, Cx\_40) in secondary position<sup>71</sup>, while one inhumation grave was found behind the rampart (*in situ*) during the 1963 excavation<sup>72</sup> one might conclude that the earthen rampart affected a previous cemetery. The above mentioned are also supported by the 1888 discoveries, when 23 gold objects were found during works for a rail road; another inhumation tomb was found, with the skeleton in crouched position, lacking funerary inventory; rescue excavation performed on the spot by A. Török have revealed another child’s tomb and an adult’s grave, both without inventory<sup>73</sup>. The new research and interpretations indicate, on the basis of funerary discoveries, that a bi-ritual cemetery was used in Sântana “Cetatea Veche” between stages BD and HA1. Due to the few available pieces of information on cemeteries dated to stage BD-HA1 in this area, one cannot formulate conclusions on the social status of the deceased. A general trait of tombs, discovered so far, consists of the uniformity of funerary inventory, unlike during stage B2-C.

On the level of social groups, through some of the tombs uncovered in the Lower Mureș, one can individualize the group of warriors’ tombs in Pecica “Site 14” during stage B2-C (Cx\_067, Cx\_092, and Cx\_098). One can also note that this group also accumulated the most numerous funerary goods. Another case that can lead to conclusions on a certain specialization is that of tomb 472 in Tápé; one bronze awl and a deer antler scoop? were found in the tomb of an adult woman, thus indicating her connection to agricultural and household activities. From the same cemetery in Tápé one can also mention the tomb of a mature man (157) whose funerary inventory included an awl similar to that found in tomb 472<sup>74</sup>; an antler scoop? were found in tomb 512, belonging to a man, while a scythe tip was discovered in the tomb of a juvenile.

If data on social status during stage B2-C was exclusively found in tombs, settlements were more intensely researched for stage BD-HA1. F. Móra’s excavations between 1928 and 1931 revealed a significant settlement in Szőreg C. Seventeen mould fragments were found there in a pit, maybe a dwelling, at a depth of 1.1 m<sup>75</sup>.

The settlement in Șagu “Site A1\_1” provided a real surprise through the discovery of bronze processing traces. To the few small bronze objects associated to stage BD-HA1 one can add a series

<sup>68</sup> C. Kacsó mentions the words of one of the authors of this discovery: “large pots full of ashes and bones, also containing bronze objects, were found”; see KACSÓ 1992, p. 97.

<sup>69</sup> COCIȘ ET AL 2010, p. 161; GOGÂLTAN, SAVA 2012, note 69.

<sup>70</sup> MARTA ET AL 2012, p. 289; the tombs were located in the close proximity of a settlement of which 83 features were uncovered, dated during stage HA1; the small cemetery probably belonged to the settlement Pecica “Site 15”.

<sup>71</sup> GOGÂLTAN, SAVA 2010, p. 42.

<sup>72</sup> RUSU ET AL 1996, Pl. II/2, VII/17, 18; XIV/5.

<sup>73</sup> GOGÂLTAN, SAVA 2010, p. 17.

<sup>74</sup> Another tomb from Tápé that can be connected to a certain specialization of the deceased is grave no. 462; among its funerary inventory there was a pair of pincers and a small awl; a similar pincers was deposited in tomb 604, other two in 680; tombs 462 and 680 belong to adult males, while grave 604 to a youth whose gender could not be determined. A pincers similar to these was discovered inside an inhumation grave in Sântana “Cetatea Veche” that was dated to stage BD-HA1 see RUSU ET AL 1996, Pl. II/2, VII/17, 18; XIV/5.

<sup>75</sup> MOZSOLICS 1985, p. 196–197, Taf. 273–274; FISCHL 2000, Abb. 20–21; SZABÓ 2002, 20, kép 92–94.

of other evidence for this metal's processing in the settlement: 30 moulds made of clay and sandstone were found in features Cx\_25, Cx\_182, Cx\_194 and Cx\_198 (Fig. 21–23). The identified moulds were mostly used for casting celts or chisels (Fig. 24). The most numerous moulds were found in features Cx\_194 and Cx\_198. Besides the bronze items and moulds, pottery fragments with traces of bronze melting (from pots used as crucibles) were found in pit Cx\_198, but also bronze refuse fragments from object casting, in pits Cx\_66, Cx\_182 and Cx\_193<sup>76</sup>. Taking into consideration the above mentioned discoveries, one can state that numerous large-size bronze objects were produced in the settlement during stage BD-HA1.



**Fig. 21.** Pits Cx\_25 and Cx\_24 in Şagu "Site A1\_1".

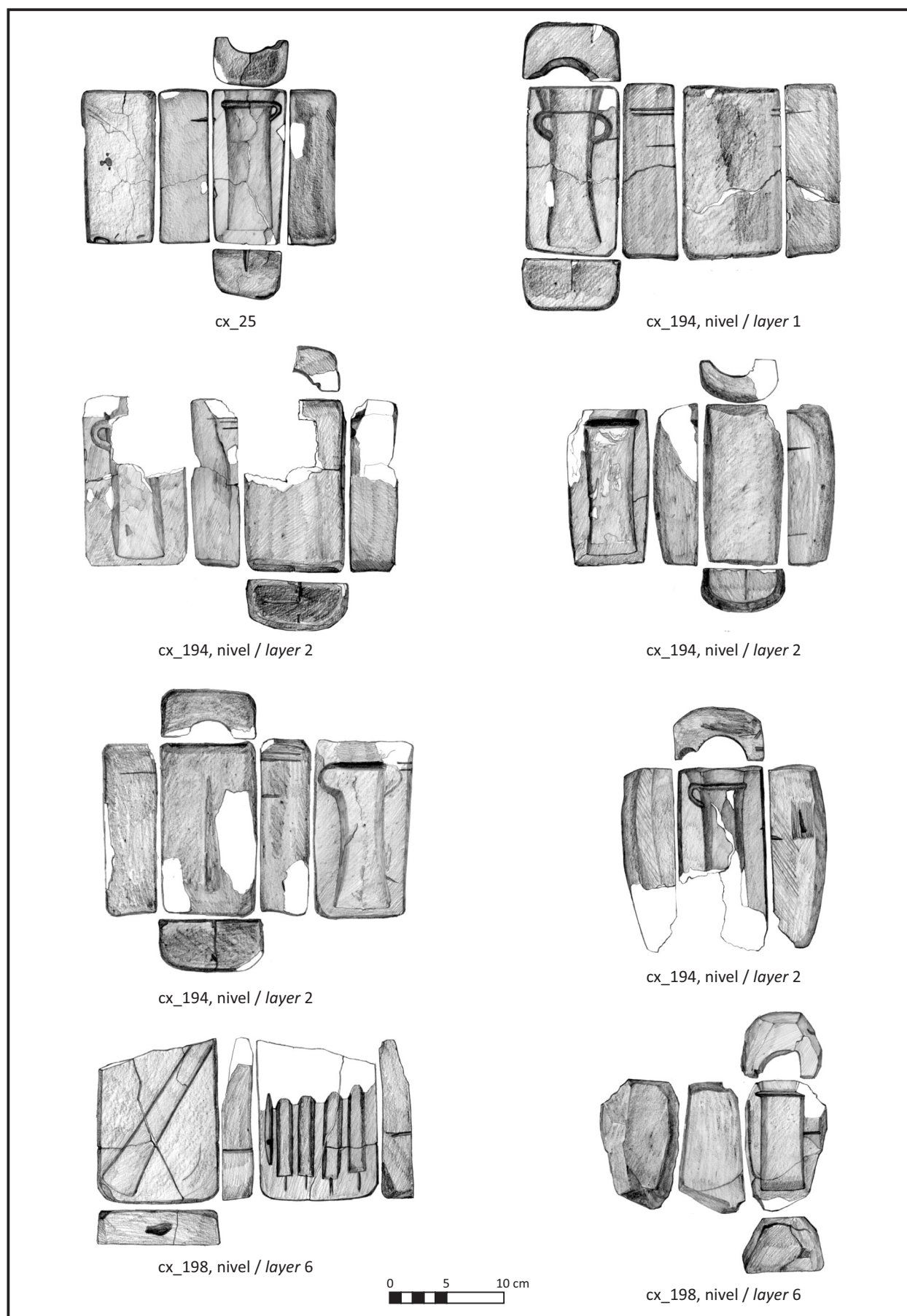


**Fig. 22.** Pit Cx\_194 in Şagu "Site A1\_1".



**Fig. 23.** Pit Cx\_198, level 6 in Şagu "Site A1\_1".

<sup>76</sup> For a more detailed discussion see SAVA ET AL 2011, p. 50–55.



**Fig. 24.** Moulds discovered in the settlement of Şagu "Site A1\_1".

The extended excavation performed on the site of Şagu “Site A1\_1” provided specialists the opportunity of discovering a pottery kiln (Cx\_180) that still preserved its last charge inside (Fig. 25)<sup>77</sup>. A large pit, Cx\_170, identified near the kiln, was probably used as a clay extraction pit<sup>78</sup>. Just like the traces of metal processing in this settlement, the pottery kiln was used during stage BD-HA1<sup>79</sup>.

The above mentioned evidence on the practice of metallurgy and pottery production in the settlements of Szőreg C and Şagu “Site A1\_1” indicate the existence of specialized masters who coordinated metallurgical activity and pottery production.



Fig. 25. Pottery kiln in Şagu “Site A1\_1”.

The present article has presented a series of proofs that attest to the fact that certain groups were well individualized in Bronze Age society. During the first stage of the Late Bronze Age, B2-C, in the Lower Mureş, these groups could only be identified through the research of funerary inventories. Thus in Pecica one notes a particular group of warriors represented by mature men. In the cemetery of Tápé, several of the identified tombs seem to belong to individuals connected to agricultural and household activities. During the second stage of the Late Bronze Age, BD-HA1, evidence can be found in settlements where traces indicating the presence of metal-working and pottery masters have been discovered.

In the following paragraphs we will show that from the perspective of social status, stage BD-HA1 is the most expressive period of the Bronze Age in the area under discussion. The number of settlements increased significantly, large-size fortifications were built, with large precincts enclosed with ditches; the phenomenon of bronze depositions reached a peak and there are also gold treasures discovered around the large fortifications.

Research performed over the last years, stray finds, but also the reinterpretation of some of the older research lead to an initial classification of settlements discovered in the area. A first type consists of large-size settlements, reaching up to 25 ha, such as those in Şagu “Site A1\_1”, Pecica “În Vii” and Felnac “Complexul Zootehnic”. Specialized activities were performed in these large settlements: bronze processing (Şagu “Site A1\_1”, Szőreg C and, probably, Pecica “În Vii”<sup>80</sup>) and pottery production

<sup>77</sup> The kiln was identified as an agglomeration of pottery and fragments from the roof. The entire kiln was built inside a pit measuring 1.90 m in length, 1.30 m in width and 0.40 m in depth. The pit was, also, provided with an access step measuring 0.50 m in length. The kiln itself was 1.40 m long, while its width was identical to that of the pit (1.30 m). After removing the pottery and roof fragments from inside the kiln, we noted that the pots were entirely preserved (but broken due to soil pressure). The kiln’s fire chamber was identified at a depth of 0.35–0.40 m and the walls of the roof, measuring 8 cm in thickness, started to appear on the margins.

<sup>78</sup> This pit’s margins were clear and its contour identified through colour. A single dark grey layer was identified, including adobe pigments in the upper part, mainly on the south-western side. The following elements were identified in the filling: several pottery fragments, among which part of a lobed bowl, small pieces of adobe, animal bone fragments, and one part from the blade of a bronze saw. The shape of the pit is irregular, the walls are almost straight, and the bottom is deeply bow-shaped. The pit measures 6.40 m in length, 5.64 m in width, and 0.80 m in depth. Due to its impressive size, irregular shape, and the pottery kiln located in close proximity, one feels entitled to consider that the complex under discussion was a clay extraction pit which was turned into a refuse pit later on or during its use.

<sup>79</sup> SAVA ET AL 2011, p. 60–63.

<sup>80</sup> Three bronze depositions were accidentally discovered in this settlement: Pecica II, III and IV; PETRESCU-DÎMBOVIȚA 1977, p. 101–102, Pl. 169/5–18; p. 170–177; 178/1; KEMENCZEI 1991.

(Șagu “Sit A1\_1”). Since now archaeological efforts mainly focused on archaeological excavations and not systematic field research, one cannot provide an adequate image of the areas around these settlements. Some research performed in the vicinity of the settlement in Șagu revealed small concentrations of archaeological material that might indicate the existence of certain small farms.

Besides these settlements, one also encounters fortifications of various dimensions, ranging from 2 to 213 ha. The largest are those in Cornești “Iarcuri”<sup>81</sup> (213 ha), Orosháza “Nagytatársánc”<sup>82</sup> (124 ha) and Sântana “Cetatea Veche”<sup>83</sup> (80 ha). Both the fortification in Cornești and the one in Sântana consist of several precincts that seem to have been destroyed by violent fires<sup>84</sup>. Other fortifications, smaller but in use in the same time with the above mentioned fortifications, are those in Firiteaz (15–16 ha), Munar “Wolfsberg/Dealul Lupului” (14 ha)<sup>85</sup>, Csanádpalota (8–9 ha)<sup>86</sup>, Șiria (3 ha). Among these fortified precinct, just the ones in Sântana, Orosháza and Cornești were researched archaeologically; the performed test trenches mainly focused on the fortification systems and no data is yet available on life inside these fortifications. The most numerous clues on activities performed inside and on the development of the site are available for Sântana. From a chronological perspective, the earliest precinct seems to have been the one labelled as precinct 1, covering an area of 14 ha; excavations performed in 1963 and 2009 have established the existence of a cemetery used outside this first fortification; later on, the erection of a new defensive system, labelled precinct 3, destroyed a part of this funerary area. This third fortification reached an area of 80 ha, that in its turn modified in time: at some point the large fortification was divided in two parts by a rampart and a ditch that defended an area of 50 ha. The extraordinary dynamics of this fortification is also reflected by the numerous metal objects discovered since 1888, when 23 gold objects were found, and later on 64 bronze artifacts were uncovered. The large number of fragmentary bronze items and the discovery of two bronze lumps and one copper lump indicate the fact that numerous commercial activities took place.

Starting from the model provided by the fortification in Sântana that was certainly a power center, one can extrapolate to the other fortifications which certainly exerted their influence over wider or smaller areas. One can mention the case of the fortification in Firiteaz, near which the most impressive treasure in the Lower Mureș was found; it consisted of 16 bracelets weighing a total of 1.29 kg of gold<sup>87</sup>. There is also the treasure in Cărați, also consisting of bracelets (0.224 kg of gold)<sup>88</sup> and the one in Alioș with four gold finger rings<sup>89</sup>. The above mentioned gold treasures might be complemented by eight bronze depositions discovered in Lipova, Igriș<sup>90</sup>, Pecica II<sup>91</sup> consisting of 343 artefacts, Pecica III<sup>92</sup>, Pecica IV<sup>93</sup>, Sâmpetru German<sup>94</sup>, Zimandu Nou<sup>95</sup>, maybe also Pâncota<sup>96</sup>, that complete the spectacular general image of the Lower Mureș.

<sup>81</sup> MEDELEȚ 1993, p. 119–150; MICLE ET AL 2006, p. 283–305; GOGÂLTAN, SAVA 2010, p. 62–69; SZENTMIKLOSI ET AL 2011, p. 819–838. I must note that in the case of this fortification I only mentioned the surface of the first two precincts that were archaeologically researched; the other two precincts were more than probably each delimited just by one ditch.

<sup>82</sup> SZEREMLEI 1900; BANNER 1939; GOGÂLTAN, SAVA 2010, p. 52–57.

<sup>83</sup> RUSU ET AL 1996; RUSU ET AL 1999, p. 143–165; GOGÂLTAN, SAVA 2010.

<sup>84</sup> In the case of the fortification in Sântana some authors have mentioned a presumed attack against the northern area of precinct 3; see GOGÂLTAN, SAVA 2012, p. 68–69, fig. 7.

<sup>85</sup> GOGÂLTAN, SAVA 2010, p. 57–61.

<sup>86</sup> CZUKOR ET AL 2013.

<sup>87</sup> MOZSOLICS 1973, p. 194; Taf. 78–79; 80/1–5.

<sup>88</sup> MOZSOLICS 1973, p. 199–200; Taf. 106.

<sup>89</sup> MOZSOLICS 1973, p. 207.

<sup>90</sup> PETRESCU-DÎMBOVIȚA 1977, p. 98, pl. 162; 163/1.

<sup>91</sup> PETRESCU-DÎMBOVIȚA 1977, p. 101–102, pl. 169/5–18; p. 170–175; 176/1–23; KEMENCZEI 1991.

<sup>92</sup> DÖRNER 1970, fig. 14/4; p. 460; PETRESCU-DÎMBOVIȚA 1977, p. 102, pl. 176/24–28.

<sup>93</sup> PETRESCU-DÎMBOVIȚA 1977, p. 102, pl. 176/29–33; p. 177; 178/1.

<sup>94</sup> PETRESCU-DÎMBOVIȚA 1977, p. 107; pl. 186/17–18; 187.

<sup>95</sup> PETRESCU-DÎMBOVIȚA 1977, p. 119; pl. 277/14–16.

<sup>96</sup> PETRESCU-DÎMBOVIȚA 1977, p. 157, pl. 374/8–10. M. Petrescu-Dîmbovița questions the nature of this deposition.

To all these indications of prestige and power one can add another impressive element to the analysis of the Late Bronze Age, i.e. those precincts delimited by ditches the purpose of which has not yet been understood; one must mention the precinct in Variaşu Mare, consisting of three precincts, the largest of which enclosing an area of ca. 65 ha, and the newly-identified precinct consisting of four concentric ditches in Semlac, that extends over an area of ca. 50 ha.

One can state that during stage B2-C the status of the individuals is strongly displayed through rich funerary inventories, while for stage BD-HA1 there is a notable consolidation and even institutionalization of social status through the construction of fortifications and the phenomenon of wealth accumulation as reflected by bronze depositions and gold treasures.

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# INDIGENOUS AND CELTIC GARMENT ASSEMBLAGES IN BANAT AND THE SURROUNDING AREAS AT THE BEGINNING OF THE LA TÈNE PERIOD (OBSERVATIONS REGARDING THE SILVER SPIRAL EARRINGS)

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**Abstract:** *The scope of this article is to identify the ways in which the local garment assemblages were combined with those of the La Tène type, or with the Illyrian ones of the north-western Balkans, in Banat and its neighbouring areas. Amongst the relevant categories of jewellery are the silver spiral earrings which appeared and were used*

*in the north-western Balkans at the end of the Early Iron Age. Similar pieces continued to be used at the beginning of the Late Iron Age, being discovered in the funerary inventories of some "Celtic" cemeteries dated to the La Tène B2, for example in the recently discovered one from Aradu Nou, in Banat, or in the well-known cemeteries from Belgrade-Karaburma, Kostolac-Pecine and Kostolac-Repnjak, in Serbia.*

The beginning of the La Tène period in the Eastern part of the Carpathian Basin was marked by an extensive process of colonization. From the middle of the 4<sup>th</sup> century to the beginning of the 3<sup>rd</sup> century BC different Celtic groups from Central and Western Europe settled in the region in successive phases (Fig. 1). This process determined the appearance of several new communities in which the newcomers mingled with the local populations<sup>1</sup>. The concomitant creation of new communal identities was based on certain processes of cultural hybridization that can be quite frequently identified in archaeological contexts<sup>2</sup>. One interesting example is the manner in which different costumes were assembled and used as means of visually expressing a particular social or ethnic identity<sup>3</sup>.

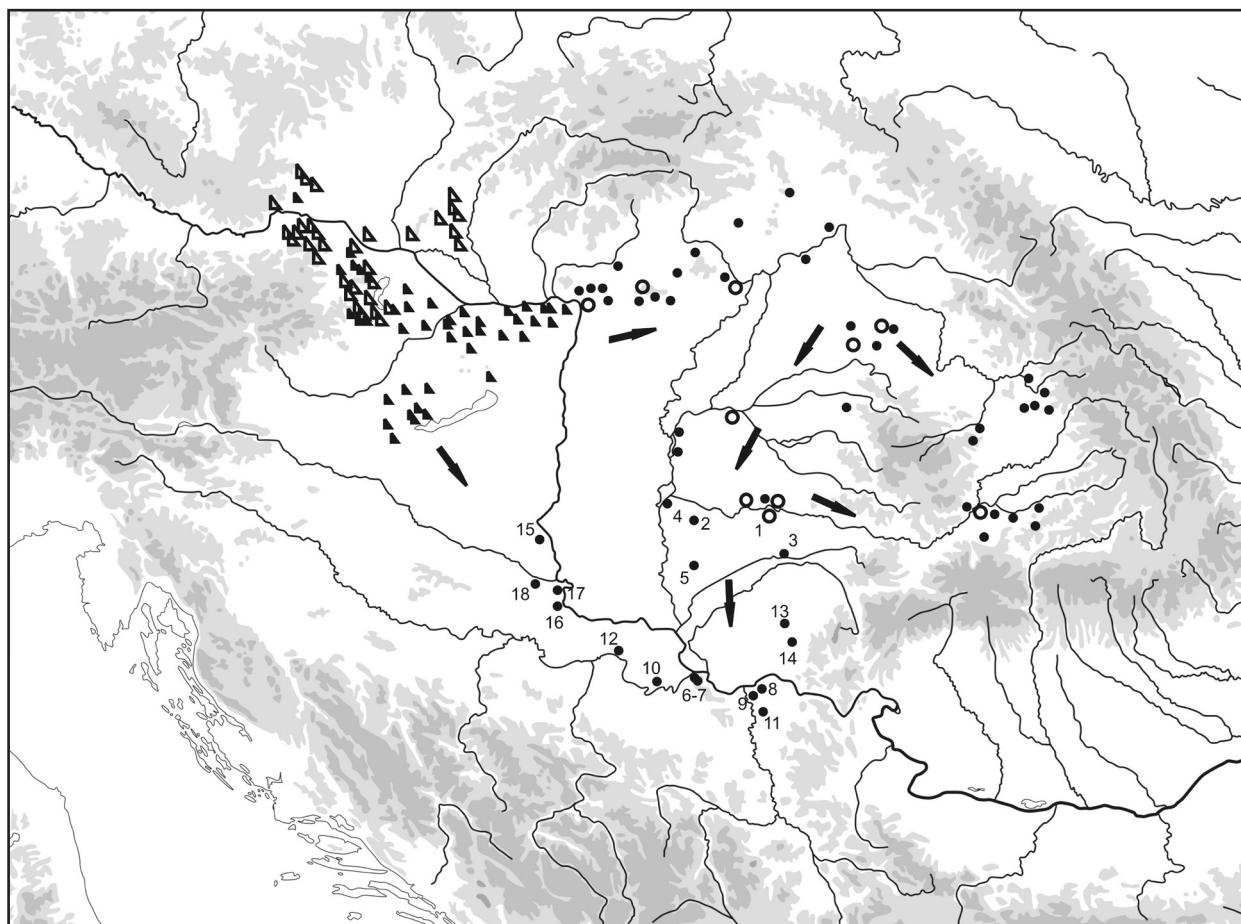
The areas of cultural interference between different ethnic communities are characterised by a continuous process of exchange and hybridization that can be also noted in the local costumes. One example is provided in the modern times by the traditional costumes of the Romanians from Northern Transylvania and the Hungarians from North-Eastern Hungary (Fig. 2). These costumes share a series of features, although some specific details set apart each ethnic group. Thus, the male costume is in both cases composed of a white shirt, sometimes accompanied by a simple vest, white wide trousers and riding boots. The wide leather belt is another important part of the costume. The shape of the hats differ from one community to another and the same can be said about the ornaments sewn on the

<sup>1</sup> RUSTOIU 2008, p. 65–98; RUSTOIU 2012; RUSTOIU 2013.

<sup>2</sup> DŽINO 2007.

<sup>3</sup> See for example ALDHOUSE-GREEN 2004, p. 28–53; WELLS 2008, p. 64–84, 129–144.

clothes or about the presence or absence of certain accessories (for example the differently coloured and ornamented haversacks). In general, these costumes were designed to be suitable for riding and all of the aforementioned communities bred and used horses intensively. At the same time these similarities point to a shared male identity expressed through a specific visual code across an area that transcended the limits of ethnic communities. The use of different details only aims to indicate the individual's belonging to a particular community within a wider geographic and cultural space.



**Fig. 1.** The distribution map of early La Tène funerary discoveries from the Carpathian Basin and directions of Celtic colonization. White triangles – cemeteries LT A; black triangles – cemeteries LT B1; white dots – cemeteries beginning in the LT B1/B2 period; black dots – cemeteries beginning in the LT B2 period.

In contrast with the male costumes, the female ones are more diverse, having different functional compositions, ornaments and colours. This wide variability points to the presence of different visual codes used to express different female identities, specific to each of the aforementioned communities. Some of them share a limited number of decorative details, without being a widespread phenomenon, for example the use of beads sewn on the costume (which are not visible on the attached illustration – Fig. 2).

The aforementioned examples indicate that certain communities which are ethnically and/or culturally different, but have several close contacts and share a similar lifestyle, may use costumes having a similar functional structure and which are integrated into a shared visual code. At the same time, they include decorative and functional details that seek to express a particular ethnic, social or gender identity. However, in the modern globalised world, various ethnic groups actively pursue the conservation and regeneration of local traditions as a means of expressing a particular and well-delimited identity, leading to an increasing popularity of the folk festivals. One consequence is the accentuation of difference and specificity in the preservation and presentation of traditional costumes. For that reason, the presented examples mainly illustrate this pragmatic modern tendency and less the dynamic of cultural interactions between neighbouring communities. This dynamic

presumes the amalgamation of certain elements of bodily ornamentation having different origins together with the adaptation of the resulting costume assemblages to the acknowledged visual codes and functional demands of the people who took them over.

Returning to the ancient times, a process of hybridization of the bodily ornamentation as a result of cultural interaction can be mostly noted amongst the elites. For example, “Thracian” aristocracy of the Northern Balkans integrated a series of Greek gold and silver jewellery in its own garment assemblages, during the 5<sup>th</sup>–3<sup>rd</sup> centuries BC. The foreign artefacts were either imported from Greek cities, or were made in Thrace by Greek craftsmen or by local people trained in Hellenistic workshops. These artefacts were adapted stylistically and morphologically to the preferences of the local clients. A systematic selection of the imported products has also been noted. Due to this practice only certain types of jewellery and garment accessories, which corresponded to the local norms of bodily adornment specific to the aristocracy, arrived in Thrace, the range of forms being different from the one encountered in the Greek cities on the Black Sea coast<sup>4</sup>.

Taking into consideration the above mentioned observations, the scope of this article is to identify the ways in which the local garment assemblages were combined with those of the La Tène type, or with the Illyrian ones of the North-Western Balkans, in Banat and its neighbouring areas. The jewellery recovered from a recently excavated grave at Aradu Nou (inhumation grave no. Cx 50) are relevant for this discussion<sup>5</sup>. Amongst these artefacts is a pair of silver earrings or hair-rings which will be thoroughly analysed.

The inhumation burial no. Cx 50<sup>6</sup> (Fig. 3) has a rectangular pit, with the dimensions of 1.85 × 1.01 m, and is oriented South–North, with the head of the deceased to the South. The funerary inventory consists of seven ceramic vessels, wheel-made and handmade, and a rich garment assemblage. The latter includes two simple bracelets made of bronze rods and of local origin<sup>7</sup> and several rows of glass beads having different shapes and colours, some of local origin (green, blue or translucent and having a bi-truncated shape) and others of Mediterranean origin (translucent amphora-shaped beads<sup>8</sup>). The rows also include coral and amber beads. One of these rows has a silver closure with filigree decoration of Greek origin. The assemblage of rows consists of over 400 beads of different shapes and origins, being the largest from the Carpathian Basin and the Balkans. The jewellery set also includes the aforementioned pair of silver earrings.

The earrings are made of silver twisted wire, which was also spiralled. In both cases one end is flattened and rolled up into a knob or “eye” having a cylindrical shape. The diameters of the earrings are of 2 cm and 1.6 cm respectively (Fig. 4).

Typologically, the silver and bronze spiral earrings made of twisted wire were classified, by B. Jovanović, in three variants<sup>9</sup> (Fig. 5):

- a. earrings having one rolled up end;
- b. earrings having a loop end;
- c. earrings having a conical end.

<sup>4</sup> TONKOVA 1994; TONKOVA 1998; TONKOVA 2000–2001.

<sup>5</sup> The cemetery from Aradu Nou – Grădinile C.A.P. (in the North-Western part of this neighbourhood of Arad) was discovered in 1967 during the excavation of an irrigation canal. Several funerary contexts were destroyed, but two burials (one of cremation and another of inhumation) were archaeologically investigated: DÖRNER 1968, p. 11–12; CRIȘAN 1974, p. 40–44. Another group of 16 graves (some of cremation but the majority of inhumation) were unearthed in 2010, during the rescue excavations along the ring road bypassing Arad (Sit B\_04, Km 8+540–8+840). The rescue excavations were carried out by Adrian Ursuțiu. A monograph of the cemetery will be published by Aurel Rustoiu and Adrian Ursuțiu.

<sup>6</sup> RAPORT 2010, p. 65.

<sup>7</sup> See similar items in the area of the Vekerzug culture (or Alföld group): KEMENCZEI 2009, p. 183, Pl. 29/2, 4; 45/16–17; 76/12 etc. Some of these pieces remained in use until the end of the LT B1 and the beginning of the LT B2: BUJNA 2005, p. 83, Fig. 67.

<sup>8</sup> For this type of beads see POPOVIĆ 1997; SCHÖNFELDER 2007; RUSTOIU 2008, p. 52–57; RUSTOIU 2011, p. 95–96.

<sup>9</sup> JOVANOVIĆ 1994, p. 116.

The two pieces from the Aradu Nou burial belong to the first variant identified by the Serbian specialist. Chronologically, this type of earrings appeared at the end of the Early Iron Age, in the 5<sup>th</sup> – 4<sup>th</sup> centuries BC, being used until the LT B2a, more precisely until the end of the 4<sup>th</sup> century and the beginning of the 3<sup>rd</sup> century BC<sup>10</sup>. One grave from Donja Dolina, dated to the end of the Early Iron Age<sup>11</sup> (Fig. 7), and another from Kostolac – Repnjak, belonging to the beginning of the Late Iron Age<sup>12</sup> (Fig. 8), are important indicators of these chronological limits. As concerning the distribution area, these earrings are known in the North-Western Balkans and the Southern Carpathian Basin (Fig. 6). Sometimes their morphology is also encountered in the case of certain types of bracelets, indicating, once more, the local origin of these pieces<sup>13</sup>.

The grave no 63 and 67, from the Celtic cemetery at Belgrade-Karaburma<sup>14</sup>, belonging to some indigenous women, provide relevant examples for the manner in which these earrings were adapted to the new norms of bodily ornamentation of the La Tène (Fig. 9). The two funerary inventories include silver earrings and glass beads necklaces of local traditional type, but the costumes were completed with a brooch of the early La Tène type<sup>15</sup> and a belt having an iron buckle of the same origin respectively<sup>16</sup>.

The situation from the mentioned grave at Aradu Nou is different from the one encountered at Belgrade-Karaburma. In this case, the silver earrings are associated with two local bronze bracelets and several rows of over 400 beads made of glass, coral and amber. At the same time, it is important to note that one of the rows has a closure of Greek type, made of silver and having a filigree decoration, which may point to the source of this item that ended in the La Tène environment from Banat.

The analogies of this costume richly decorated with glass, coral and amber beads are encountered in the North-Western Balkans. Similar costumes are present in late Hallstatt burials at Novo Mesto – Kapiteljska njiva<sup>17</sup> or in the early La Tène burial from Velika in Croatia<sup>18</sup>. These ornaments, unknown in the La Tène environment from the Carpathian Basin, may suggest that the deceased from Aradu Nou came from the Illyrian area in the North-Western Balkans. In this case, her interment into a Celtic cemetery points to a possible matrimonial alliance. Such inter-communal alliances and connections were common in areas characterised by frequent inter-ethnic contacts and contributed to the creation and maintaining of some complex social networks between the elites of different communities<sup>19</sup>.

From this point of view a relevant example is provided by the grave no. 3 from Remetea Mare, the sole inhumation burial within the entire cemetery. Its presence also attests the establishing of matrimonial alliances between the elites of the Celtic groups that arrived in Banat and the local communities from the south of the Danube<sup>20</sup>.

In conclusion the grave from Aradu Nou reflects, through the composition of the decorative elements of the costume, the existence of some complex inter-communal connections during the initial phase of colonization in the aforementioned region. This can be another example of a matrimonial alliance that settled the relationships between the newcomer communities from Banat and the indigenous ones from the North-western Balkans. It has been noted that the mobility of the women as a result of extra-communal marriages can be identified archaeologically if the functional

<sup>10</sup> See further comments in JOVANOVIĆ 1994; JOVANOVIĆ 2007; LJUŠTINA, SPASIĆ 2012, p. 393–394, with the bibliography.

<sup>11</sup> GAVRANOVIĆ 2007, p. 413–414, Fig. 11.

<sup>12</sup> JACANOVIĆ 1987.

<sup>13</sup> See for example the pair of bronze bracelets from the inhumation burial no. 54, belonging to a child, from Doroslovo-Đepfeld: LJUŠTINA 2010, p. 62, Fig. 5; LJUŠTINA – SPASIĆ 2012, p. 394.

<sup>14</sup> TODOROVIĆ 1972, p. 26–28, Pl. 23, 25; GUŠTIN 1984, p. 321, Fig. 11; LJUŠTINA, SPASIĆ 2012, p. 392–393, Fig. 2, Pl. 1.

<sup>15</sup> This is a regional variant of the *Paukenfibel* type.

<sup>16</sup> A quite similar, albeit not identical, iron buckle comes from the grave no. Cx 41 at Aradu Nou. For other analogies in the Carpathian Basin see BUJNA 2011, p. 26, Fig. 21.

<sup>17</sup> KRIŽ 2000.

<sup>18</sup> POPOVIĆ 1996; MAJNARIĆ-PANDŽIĆ 1996, Fig. 1–3; DIZDAR, POTREBICA 2002, p. 113, 123, Pl. 1–2.

<sup>19</sup> RUSTOIU 2012.

<sup>20</sup> RUSTOIU 2004–2005; RUSTOIU 2008, p. 126–132.

structure of the costume from the original homeland is preserved by the owner upon her settling in the new community<sup>21</sup>. The displaying of an original identity by the family and community through the interment of the deceased wearing the specific costume was significant. The funerals were important social events in which the mourners expressed and reiterated the social status of the family and its position within certain networks of social connections; the descendants were entitled to both due to the traditional kinship relations and inter-familial alliances. At the same time, the manner in which the funerary inventories were assembled was part of the strategy through which the memory of the ancestors was preserved and, at the same time, allowed the perpetuation of certain elements which defined the ethnic or social collective identity<sup>22</sup>.

On the other hand, the graves no. 63 and 67 from the Celtic cemetery at Belgrade-Karaburma, which contain both local and La Tène jewellery and garment accessories, more likely illustrates the cohabitation of the local group with a newcomer one. The two costumes, including a mixture of artefacts, reflect the adaptation of some elements having different origins to a hybrid assemblage which was probably meant to reflect a more fluid, situational identity.

Lastly, it has to be also noted that in the “border” or “marginal” zones the fashion specific to a particular region may interfere with the one specific to the neighbouring area. In such cases some foreign decorative elements tend to be adopted within the local garment assemblages. This is the case of the Southern Carpathian Basin in the period preceding the Celtic colonization<sup>23</sup>. The hoard of silver jewellery from Čurug, in Serbia, belongs, chronologically, to the pre-Celtic horizon in the region and contains, aside from a set of jewellery specific to the North-Western Balkans, a silver brooch of the early La Tène type<sup>24</sup>.

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<sup>22</sup> WILLIAMS 2003, p. 10; WELLS 2007, p. 472–474.

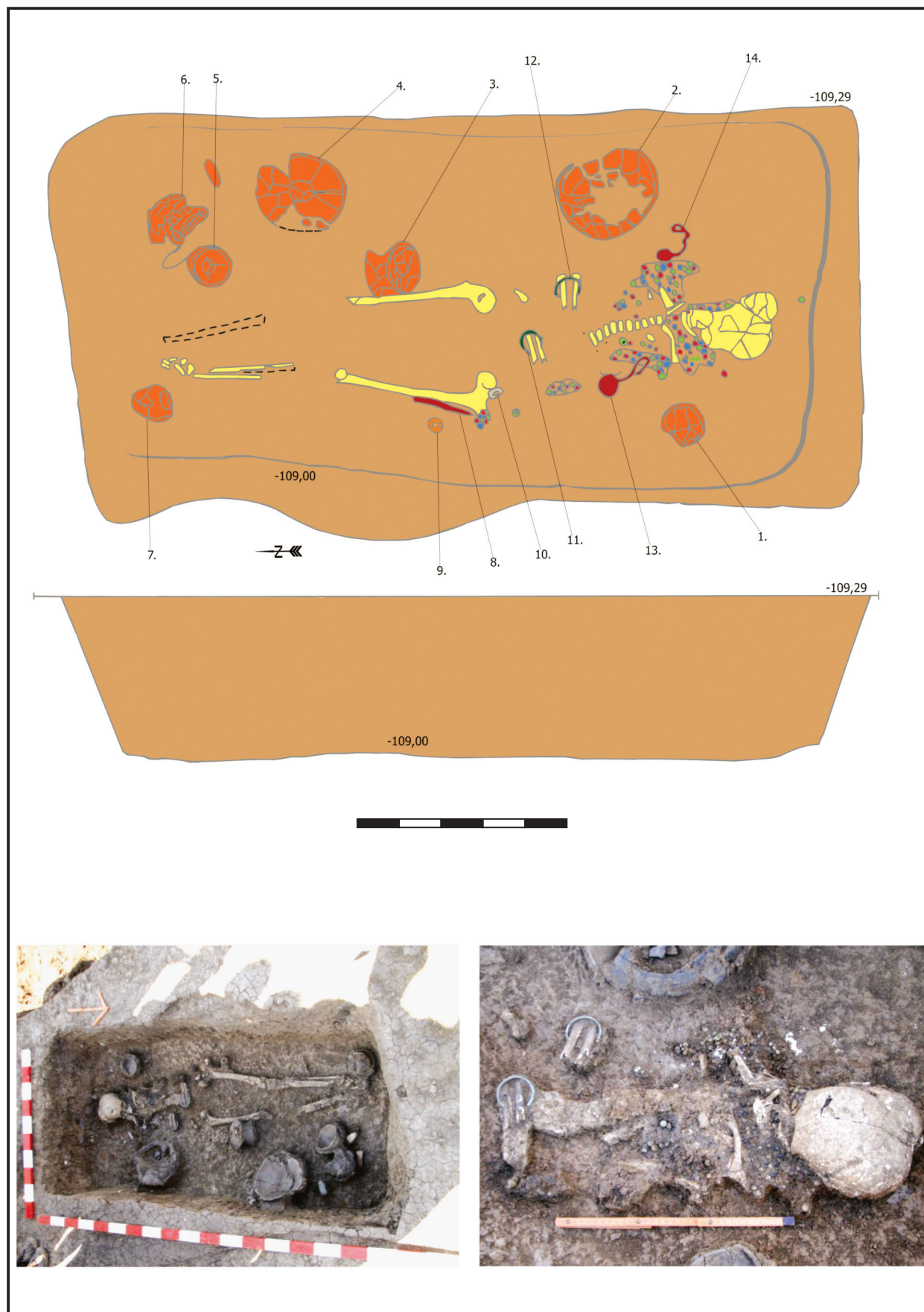
<sup>23</sup> POPOVIĆ 1996.

<sup>24</sup> LJUŠTINA 2010.

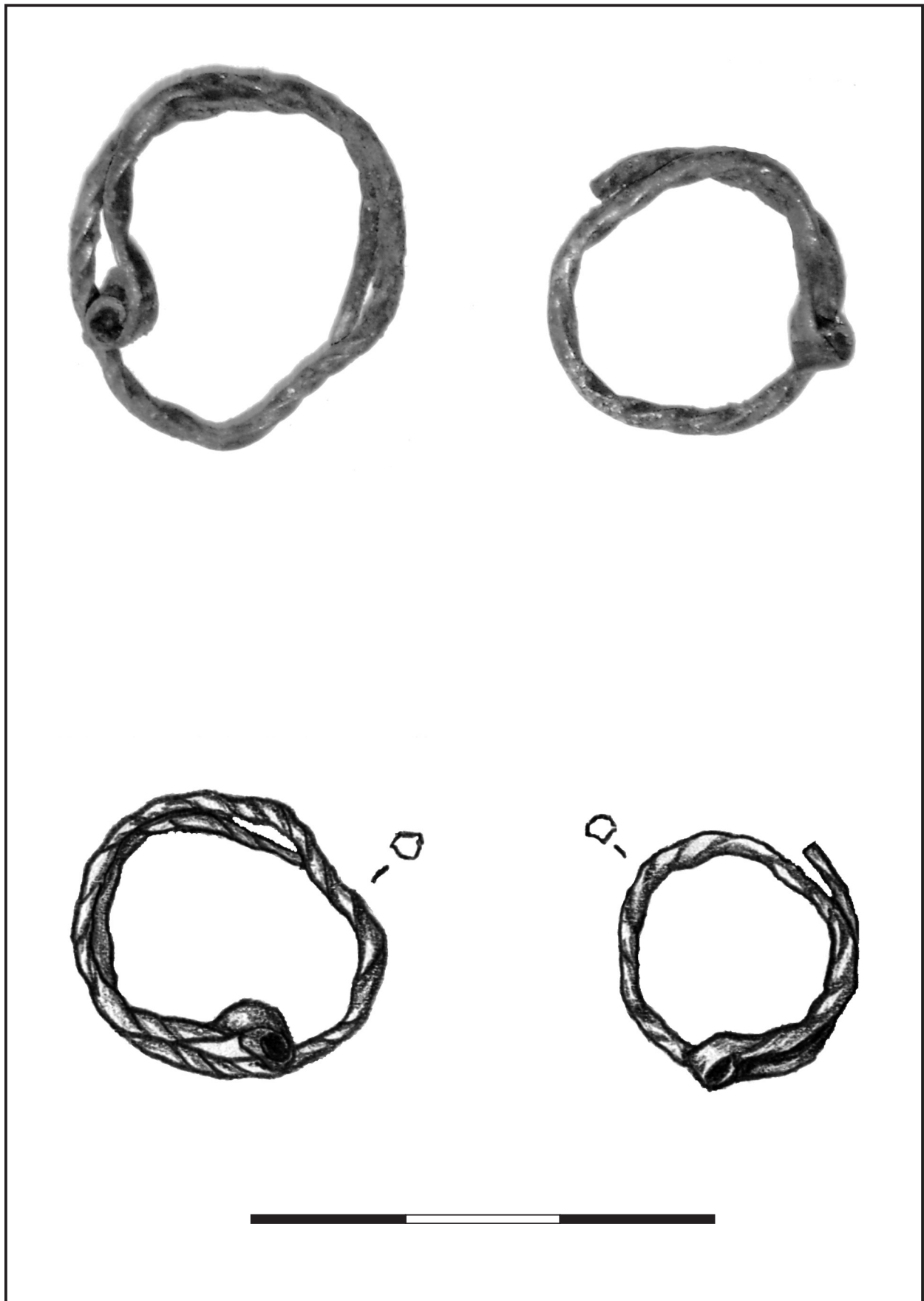
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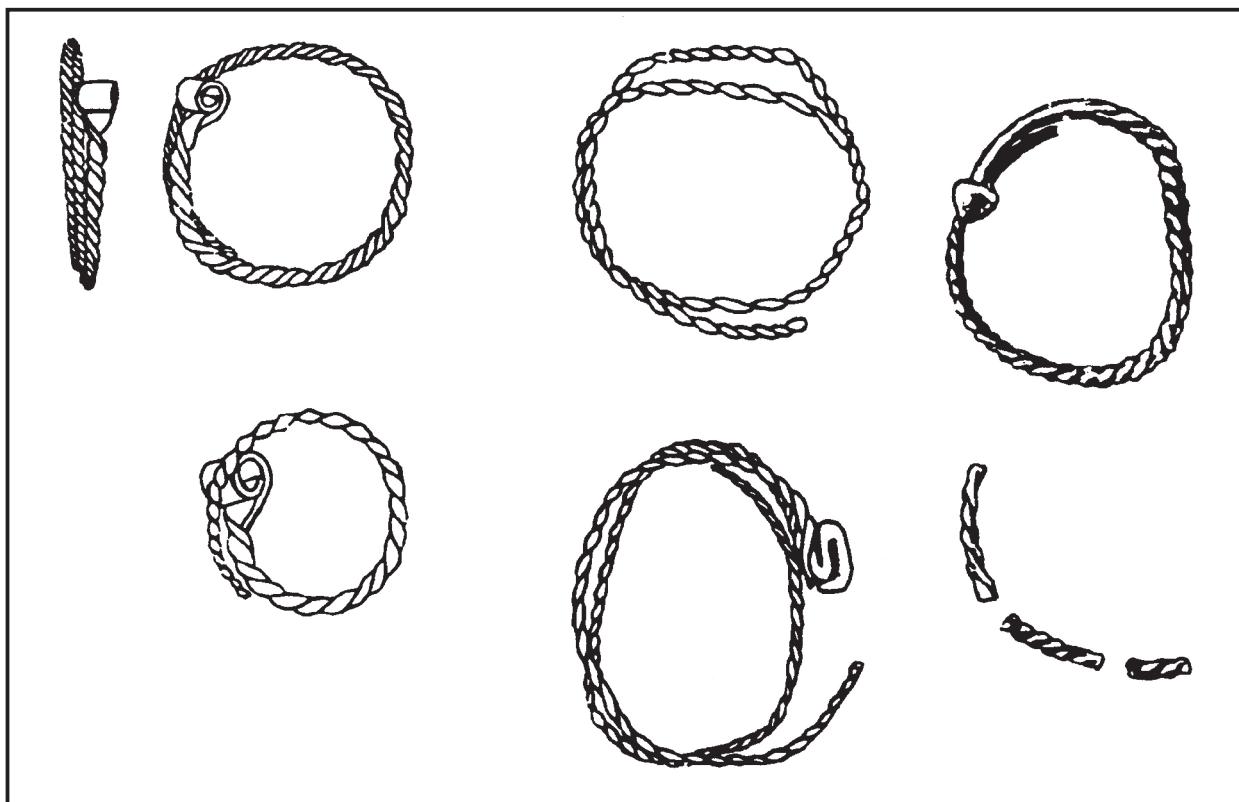
**Fig. 2.** Traditional costume from Northern and North-Western Transylvania and North-Eastern Hungary: Codru region (above left), Maramureş (above right), Oaş (below left) and Hortobágyi (below right). Google Images.



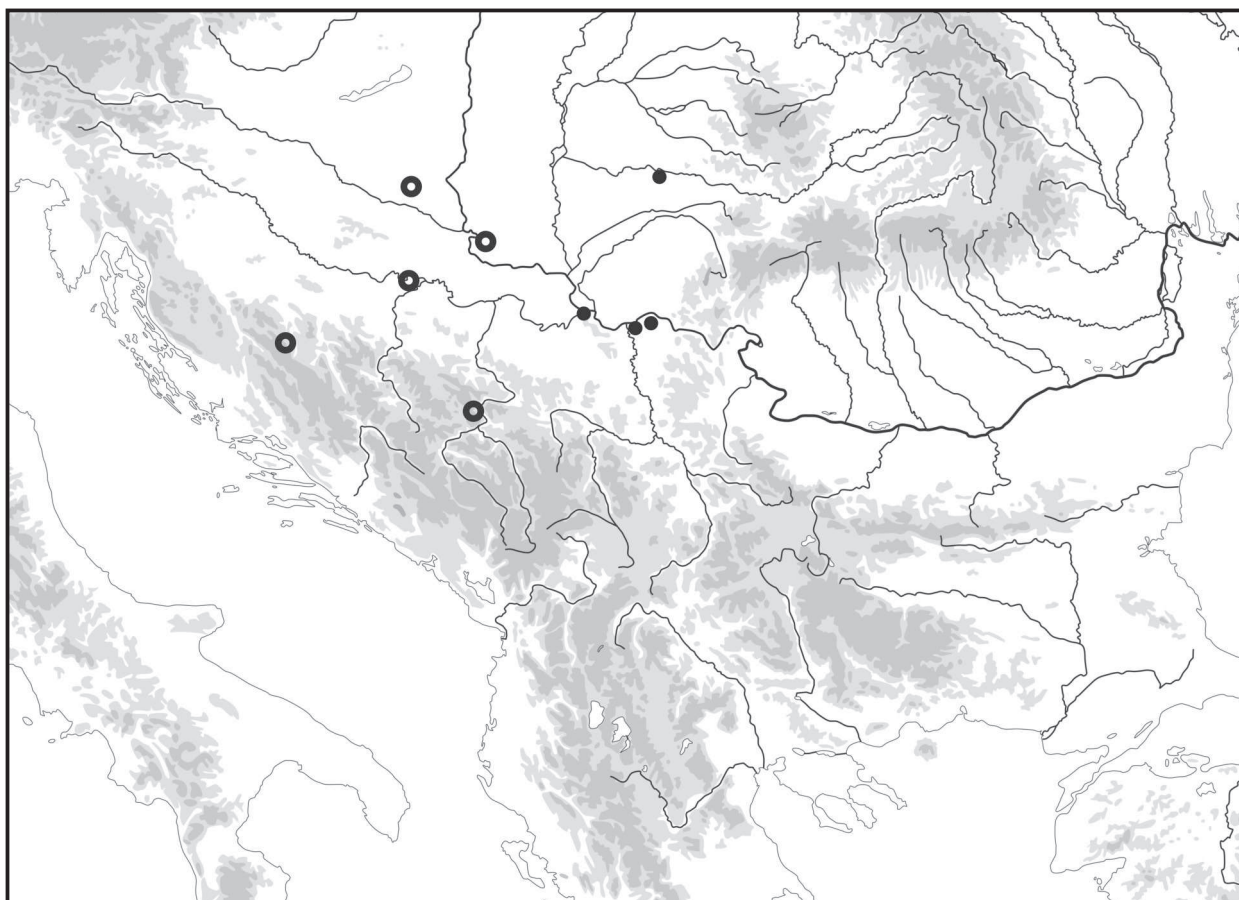
**Fig. 3.** The grave no. Cx 50 from Aradu Nou. Drawings and photos A. Ursuțiu.



**Fig. 4.** The silver earrings from the grave no. Cx 50 at Aradu Nou.



**Fig. 5.** The typology of the spiral earrings after JOVANOVIĆ 1994. Left to right: the variants a–c (finds from Belgrade-Karaburma – graves no. 63 and 67, and Pecine – grave no. G3 991).



**Fig. 6.** The distribution of the annular spiral jewellery (earrings and bracelets): with dots – Ha D-LT B1; black dots – LT B2a.

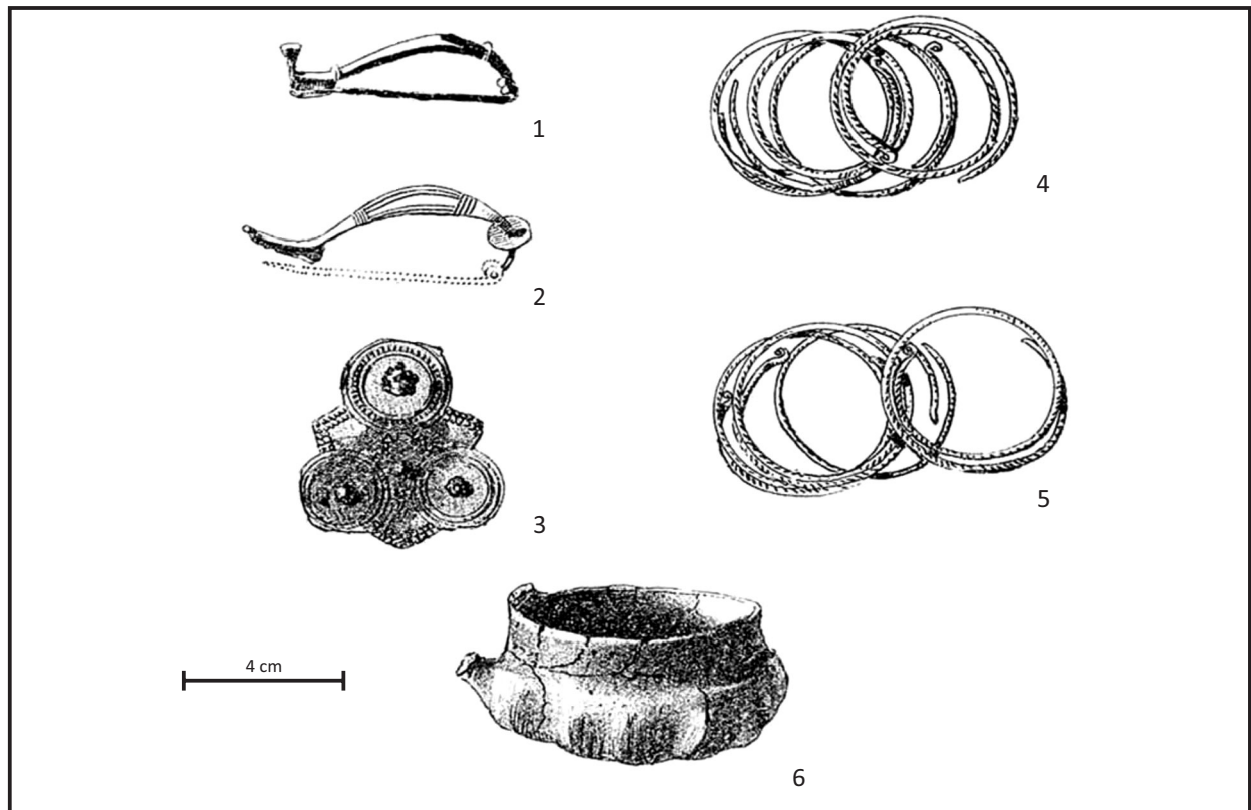


Fig. 7. The inventory of the grave from Donja Dolina (after GAVRANOVIĆ 2007).

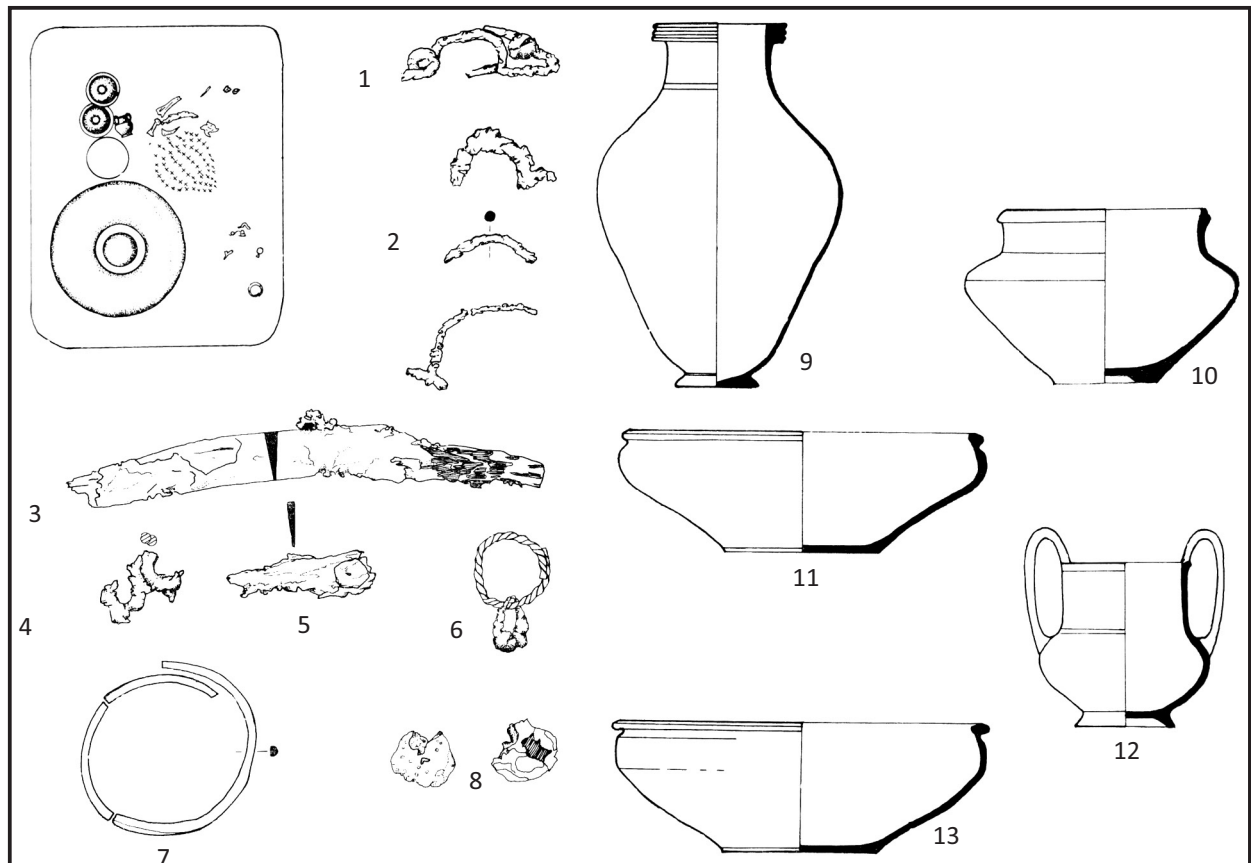
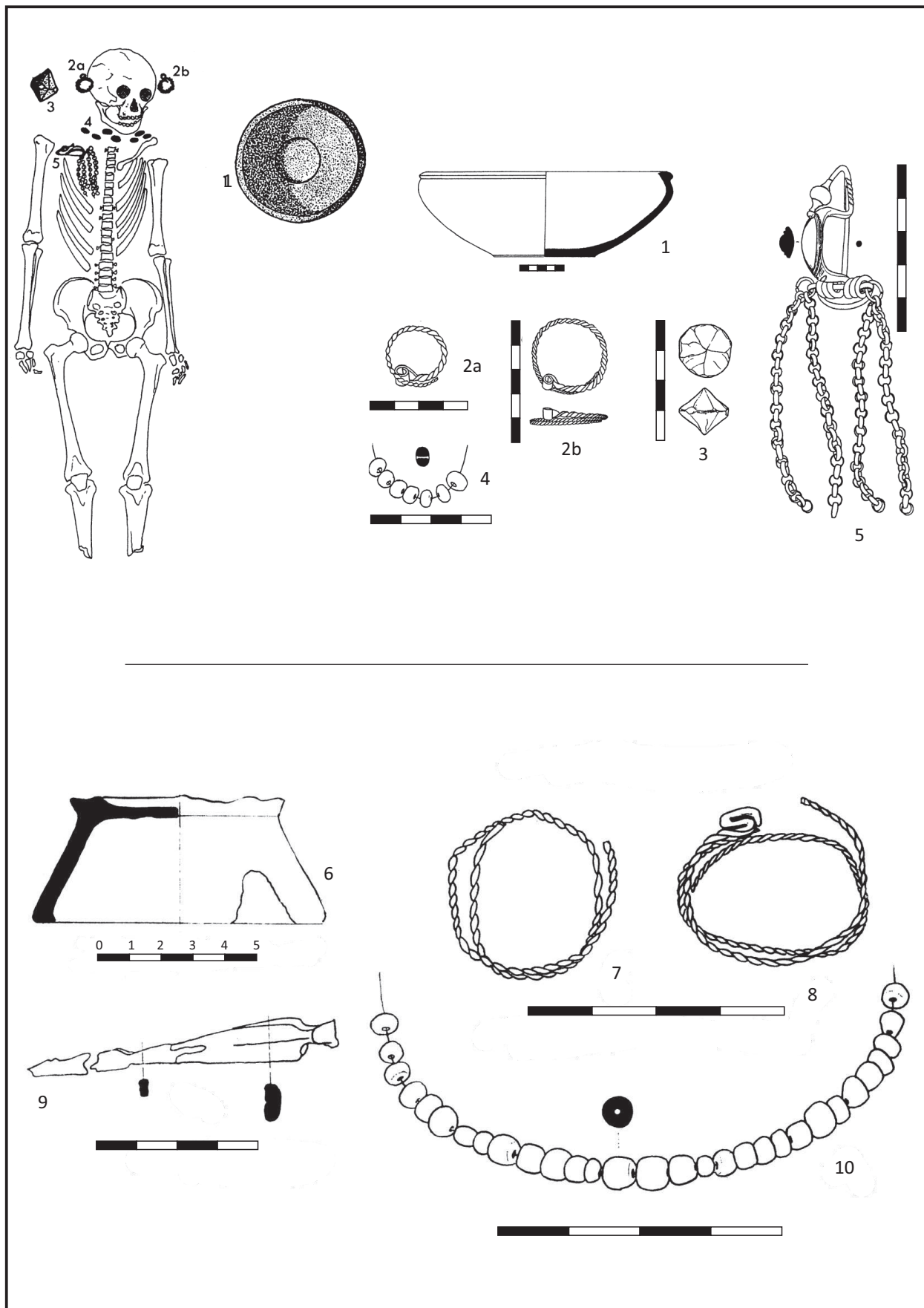


Fig. 8. The inventory of the grave from Kostolac - Repnjak (after JACANOVIĆ 1987).



**Fig. 9.** The graves no. 63 (above) and 67 (below) from Belgrade-Karaburma (after TODOROVIĆ 1972).

# DOUBLE COSTUMES IN FEMALE BURIALS FROM THE CARPATHIAN BASIN. COMMENTS REGARDING SOME GARMENT ASSEMBLAGES FROM FÂNTÂNELE (ROMANIA) AND BREŽICE (SLOVENIA)

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**Keywords:** *costumes, anklets, bracelet, brooch, La Tène.*

**Abstract:** *The costume has an important symbolic role in social communication and in the visual expression of individual belonging to a certain ethnic, social, age, gender or professional group. Thus, the functional analysis of the costumes, more precisely of the manner in which different garment elements are combined into a particular clothing assemblage, is relevant. The present article presents two*

*particular situations identified in the cremation burial no. 62 from the cemetery at Fântânele-Dâmbu Popii (Transylvania), and in the cremation burial no. 56 from the cemetery at Brežice (Slovenia). These two graves belonged to some women and each inventory consists of two costumes identified through the presence of metal jewellery and garment accessories that survived the cremation process. In both cases their presence attests a funerary practice that is less common in the Carpathian Basin.*

Various anthropological, sociological and historical studies underline that the costume has an important symbolic role in social communication and constitutes a visual expression of an individual's belonging to a certain ethnic, social, age, gender or professional group. According to V. Kruta, the costume is a true "visual identity card" ("*carte d'identité visuelle*")<sup>1</sup> of every single person. However, archaeological contexts seldom preserved the elements of costume made of organic materials (textiles, leather, straw etc.), unless they are waterlogged, anaerobic or extremely desiccating environments. As a consequence, the specialists have to deal mainly with the metal components of the respective costumes. At the same time, these objects are mostly analysed from the typological and chronological point of view. Still, their functional analysis, more precisely the manner in which they are associated in various garment assemblages in particular contexts, provides relevant information regarding the ways in which different ethnic or social groups chose to express their identity and status.

A concrete example of functional analysis of the garment assemblages is related to the spatial distribution of female burials containing anklets in Celtic cemeteries (Fig. 1). These burials contain only anklets and belong to a particular type of funerary inventory within the range of functional assemblages that include annular jewellery worn by the deceased around their neck, arms or ankles. It has been noted that this fashion first appeared in South-Western Slovakia, in the LT B1, spreading later Southward in other areas of the Carpathian Basin (Hungary, Western Transylvania and Eastern

<sup>1</sup> KRUTA 1985, p. 27.

Austria) as well as Westward in Southern Germany and Western Switzerland. This widespread distribution was either the result of individual or collective migration or of cultural diffusion<sup>2</sup>.

Another example is provided by the female burials containing pairs of tubular anklets decorated with rows of moulded protuberances that are frequently encountered in female garment assemblages from South-Western Slovakia (Fig. 2). Such assemblages also appear in the Pișcolt cemetery, in Transylvania, pointing to a possible demographic contribution from Slovakia and to the preservation of certain traditions of the newcomers in the latter region<sup>3</sup>.

The functional analysis of the costume's elements and of the bodily adornments also allows the identification of specific funerary practices. The female burials in which two costumes were laid provide a relevant example. Thus, the article is going to discuss two archaeological contexts related to this practice, one coming from the Fântânele-Dâmbu Popii cemetery in Transylvania<sup>4</sup> and another from the Brežice cemetery in Slovenia<sup>5</sup>.

The funerary ritual in the grave no. 62 from Fântânele-Dâmbu Popii was cremation, with the burnt remains scattered into the pit (Fig. 3). The inventory consists of two pairs of vessels, one for drinking and another for eating. An iron kitchen knife was also found together with pork bones. Lastly, the funerary inventory also contains the metal elements of two female costumes (Fig. 4). The burial is dated to the LT C1 according to the types of jewellery and garment accessories<sup>6</sup>.

At first glance, this seems to be a double burial. However, in spite of the lack of anthropological data (the analysis is in progress), the characteristics of these two costumes indicate that a single deceased was interred in the pit. One of these costumes was worn by the deceased on the funerary pyre, whereas the second costume was laid intact in the pit. From the functional point of view the costumes are similar, in spite of the typological differentiation of several elements (Fig. 4).

The burnt costume consists of a pair of iron brooches, which were worn on the shoulders, and a third larger brooch of the same type, which was worn on the chest. An iron hinged bracelet decorated in the Vegetal Style, which was initially enamelled, was worn on the arm. The deceased had also worn an iron chain-belt made of eight-shaped rods, twice twisted and inter-linked, and a pair of bronze anklets with large hollow knobs (Fig. 4/A).

The second, un-burnt, costume consists of two pairs of bronze brooches, which were worn on the shoulders, and an iron brooch, which was worn on the chest. They were accompanied by an iron bracelet made of undulating wire, an iron chain-belt made of segments consisting of two twisted rods inter-linked with the help of small rings, and a pair of bronze anklets with large hollow knobs (Fig. 4/B).

<sup>2</sup> FURMAN 2012, p. 278–279. KRUTA 1985, analysing the distribution of such anklets in Champagne, noted that they are typologically and functionally similar to those encountered in cemeteries from Bohemia and the surrounding areas, being different from the functional structure of the costumes specific to the Marne region. For that reason he presumed that some groups migrated from the middle Danube to the West, towards the middle of the 3<sup>rd</sup> century BC. Along the same lines KAENEL 1990 relates the appearance of some jewellery decorated in the pseudo-filigree and granulation techniques, in Western Switzerland, in the La Tène B2, to the mobility of certain individuals coming from the Danubian Celtic lands. The strontium isotope analyses recently performed in different La Tène cemeteries are relevant for the ways in which a series of artefacts specific to particular areas circulated. On this aspect a good example is the analysis of a recently excavated cemetery from Dornach, in Bavaria. Some funerary inventories contain artefacts which typologically were mainly encountered in Bohemia and Moravia in the La Tène B2 (weapons, mainly swords, and jewellery). The analysis of strontium isotopes extracted from dental samples belonging to six deceased from the cemetery has shown that half of them came from Bohemia, whereas the others were locals who probably took over several elements of the newcomers' costume (EGGL 2003). Other recent similar analyses that examined the skeletons recovered from the Nebringen (Germany) and Monte Bibele (Italy) cemeteries illustrate different percentages of individual mobility (SCHEERES ET AL 2013); further comments about various forms of migration and individual mobility in RAMSL 2003; RUSTOIU 2008; RUSTOIU 2013.

<sup>3</sup> BREŽŇANOVÁ 2012.

<sup>4</sup> RUSTOIU, MEGAW 2011.

<sup>5</sup> JOVANOVIĆ 2011.

<sup>6</sup> See the comprehensive analysis of the funerary inventory and its dating in RUSTOIU, MEGAW 2011, p. 225–228.

As previously mentioned, the two costumes are functionally identical: brooches worn on the shoulders and the chest, a chain-belt, a bracelet and two anklets. With the exception of the bracelets, all of the items are dated to the LT C1. On the other hand, the bracelets correspond to the same functional scheme and both are earlier dated, appearing in the LT B1, and being used until the LT B2. For example the bracelet, decorated in the Vegetal Style has decorative and typological analogies in Western Europe<sup>7</sup> (Fig. 5). The bracelet made of undulating iron wire has similar characteristics<sup>8</sup> (Fig. 6). It can be, therefore, concluded that the costumes from Fântânele-Dâmbu Popii illustrate a common scheme of bodily ornamentation corresponding to some particular trends specific to the LT C1 and, at the same time, preserve a prized element (perhaps having a perceived magic or/and sentimental value due to its connections with the past) from the original homeland of the ancestors who colonized Transylvania.

The grave no. 56 from the Brežice cemetery illustrates another situation in which two costumes were concomitantly interred, in the LT C1 (Fig. 7). Due to these features the grave was initially considered to be double. However, the anthropological analysis of the cremated human remains has proven that a single person, a woman, was interred. On the other hand, the garment accessories and the jewellery belong to two costumes, both burnt on the pyre and fragmentary preserved. In spite of the poor state of conservation, the functional structure of the two costumes can be reconstituted.

Thus, one of the costumes includes a bronze brooch with pseudo-filigree decoration and a finger-ring decorated in the same technique. The deceased had, probably, worn a cloak which was fastened on the chest with an iron pin having a chain. She had also worn an iron bracelet, an iron belt and two simple iron anklets (Fig. 7/A). The second costume from this grave includes a pair of iron brooches, probably, worn on the shoulders, a third iron brooch which worn on the chest, a bronze bracelet, an iron belt and a bronze anklet with large hollow knobs (Fig. 7/B).

The elements of these two costumes illustrate the combination of certain wider bodily adorning, trends with the need to construct a particular identity image. Thus, the first costume includes a series of items which are specific to the Taurisci populations from the South-Eastern Alpine region, like the bronze brooch with pseudo-filigree decoration and the iron fastening pin<sup>9</sup> (Fig. 8). The second costume includes widespread items, which are typologically and functionally common across the entire Carpathian Basin, including the Fântânele-Dâmbu Popii cemetery. These combined features bring into discussion the problem of parallel identities – individual, related to a particular social group or trans-communal. All of them are situational and are expressed through a multitude of means, which are related to different contexts and relations with the others. Therefore, one of the two costumes from the grave no. 56 from the Brežice cemetery might have served to illustrate an identity that was relevant to the respective community, whereas the second one was meant to express the social status of the owner at the trans-communal level. The latter situation presumes the existence of a series of

<sup>7</sup> See the analysis of V. Megaw in RUSTOIU, MEGAW 2011, p. 229–233.

<sup>8</sup> The iron bracelet made of undulating wire is related to similar pieces made of bronze and dated to the early La Tène (LT B1) that are typical of the so-called Duchov-Münsingen horizon (KRUTA 1979, p. 84). These bracelets are present in Central and Western Europe (Bohemia, Switzerland, Bavaria and Lower Austria: KRUTA 1979, p. 85, 91, Fig. 3 – distribution map; KAENEL 1990, p. 241 – “anneaux en meandres”; KRÄMER 1985, p. 168, Fig. 26/10; RAMSL 2011, p. 117–119 etc). In the Carpathian Basin such finds are less numerous; one piece made of bronze wire comes from Chotin, grave 25 (RATIMORSKA 1981, p. 48–50, Pl. 19/3), another made of silver wire is known from Farnos, grave 1 (HELLEBRANDT 1999, p. 28, Pl. 5/8), in the Great Hungarian Plain and another, also of silver, comes from Pişcolt, grave 174 (NÉMETI 1989, p. 95, Fig. 17/5), in Transylvania. All these funerary contexts have been dated to the LT B2. The most recent analysis of the undulating wire bracelets (*bracelets méandriiformes*) belongs to H. Delnef. She notes that such pieces are concentrated in three large European groups (in Switzerland, Bohemia and Champagne) completed by three other secondary groups (Châtillonnais, northern Italy and Moravia). The easternmost finds come from Chotin and Farnos. Chronologically there are four evolutive phases between the LT B1a and LT B2b (DELNEF 2003).

<sup>9</sup> For the brooches of the LT C scheme with pseudo-filigree decoration see JOVANOVIĆ 2011, p. 55–58, Fig. 5 – distribution map of the south-eastern Alpine and Hungarian variants. For the iron fastening pins of the Brežice type see GUŠTIN 2003; TOMIČIĆ, DIZDAR 2005, p. 97–101, Fig. 5.

interactions and social contacts with other communities from the Carpathian Basin, which must have been regular or strong enough to make the visual expression of group identity very important, leading to a careful selection and assembling of particular costumes and bodily adornments.

In the case of the burial from Brežice other observations and interpretations are also possible. One example is the concomitant cremation of both costumes on the pyre. It might be presumed that the deceased had worn one of the costumes during the funerary ceremony, whereas the other one was also placed on the pyre, and not in the pit as in the case of the burial from Fântânele-Dâmbu Popii. Another possibility is that the two costumes were related to different seasons, the one including a cloak being used only when the weather was cold. Lastly, the deceased might have been dressed with both costumes before being laid on the pyre. However, this hypothesis is less convincing as the use of more than two anklets is not attested in the communities from the Carpathian Basin, so far<sup>10</sup>.

In conclusion, the functional analysis of the garment assemblages, and not only the typological and chronological one, may provide a series of relevant information regarding the ways in which various individuals or communities choose to visually express their identities. The two burials brought into discussion are illustrative in this case. At the same time, they attest a less frequent funerary practice which needs further analyses.

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<sup>10</sup> See BUJNA 2005; FURMAN 2012.

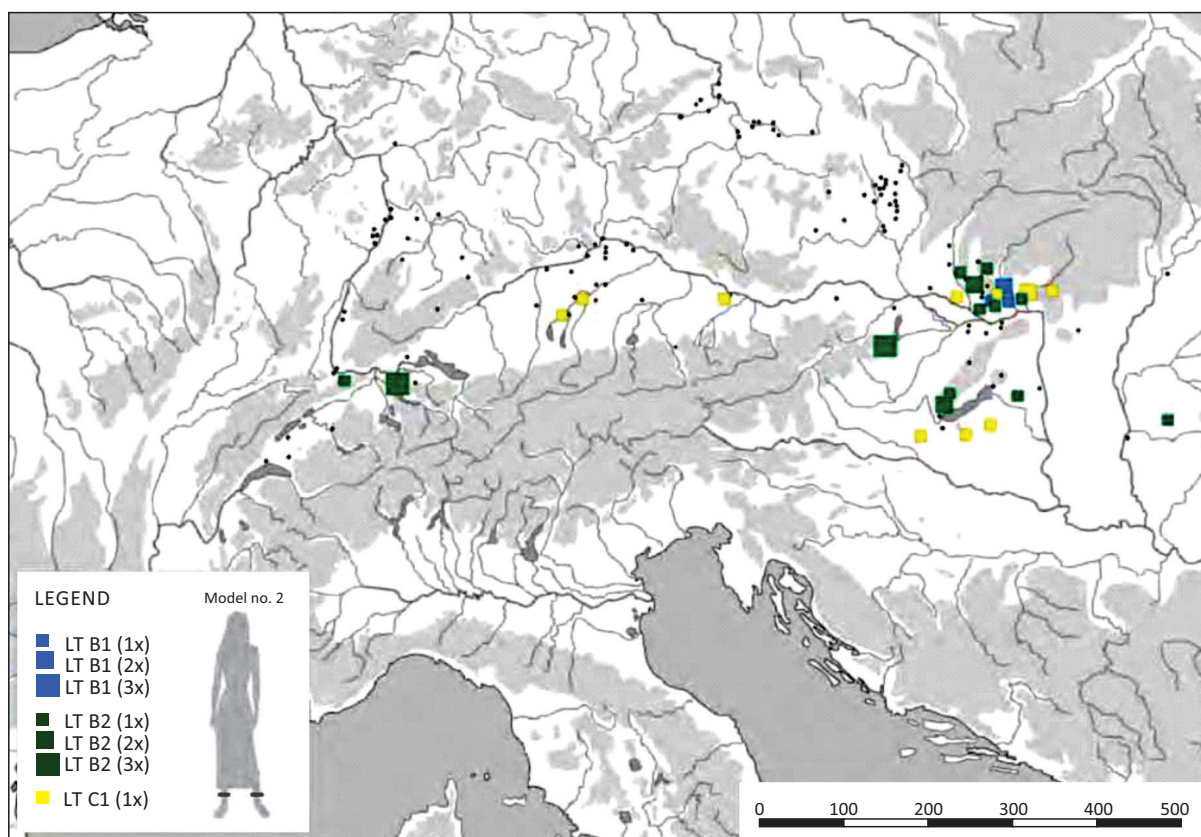
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|                  | Costume 1  | Costume 2   |
|------------------|--|---|
| <b>Shoulders</b> | - iron brooches no. 14–15, in a pair, one on each shoulder | - bronze brooches no. 9–10, a pair, one on each shoulder<br>- bronze brooches no. 11–12, a pair, one on each shoulder |
| <b>Chest</b>     | - iron brooch no. 13                                       | - large iron brooch no. 8   |
| <b>Waist</b>     | - iron chain no. 6   | - iron chain no. 7  |
| <b>Arm</b>       | - armring decorated with Vegetal motifs no. 21             | - iron armring made of waved wire no. 20  |
| <b>Ankles</b>    | - anklets no. 18–19  | - anklets no. 16–17   |

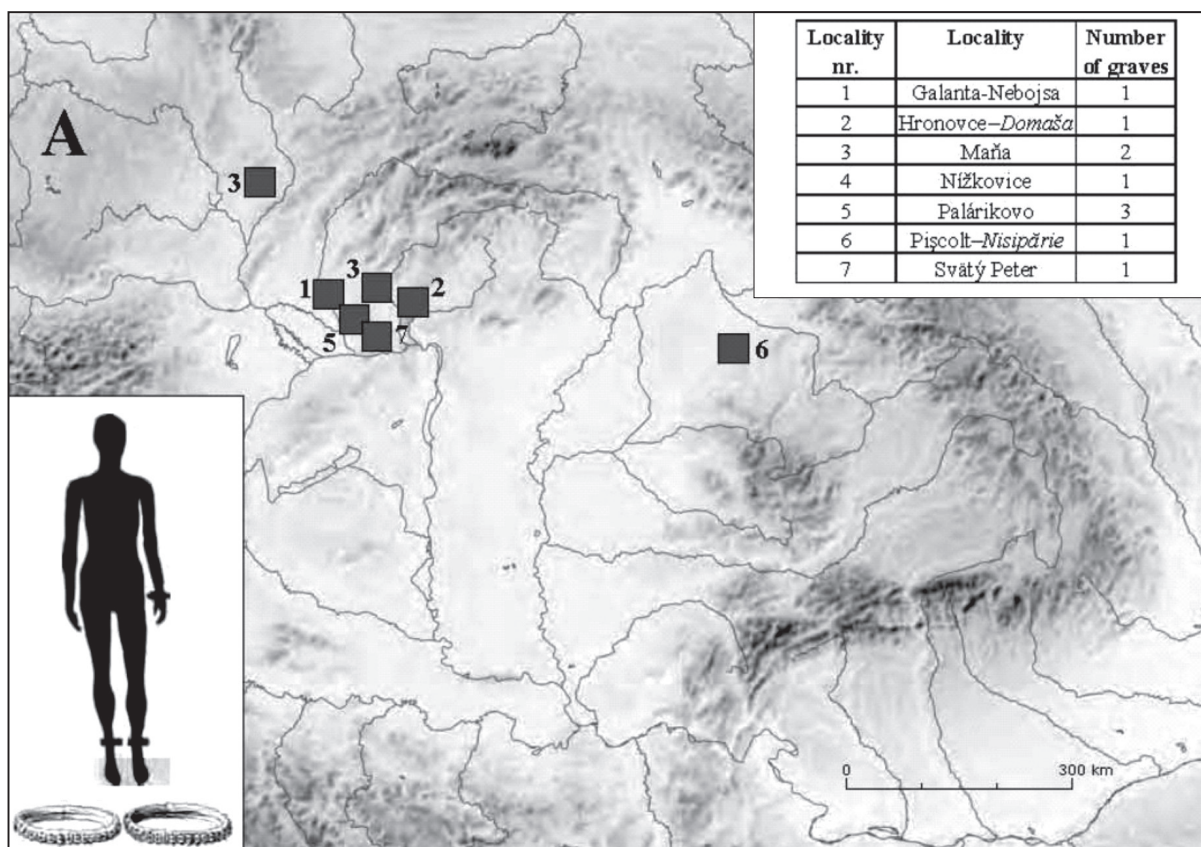
**Table 1.** Fântânele-Dâmbu Popii, grave no. 62: Functional distribution of the sets of bodily ornaments and garment accessories.

|                  | Costume 1   | Costume 2   |
|------------------|---|---|
| <b>Shoulders</b> | - bronze brooch no. 1 on one shoulder                     | - pair of iron brooches no. 4–6, one on each shoulder |
| <b>Chest</b>     | - iron pin with chain for fastening the cloak, no. 12–14. | - large iron brooch no. 3                             |
| <b>Waist</b>     | - iron chain no. 17                                       | - iron chain no. 15–16                                |
| <b>Arm</b>       | - iron bracelet on one arm, no. 11<br>- bronze ring no. 2 | - bronze armring with a knob no. 8                    |
| <b>Ankles</b>    | - iron anklets no. 9–10                                   | - bronze anklet no. 7                                 |

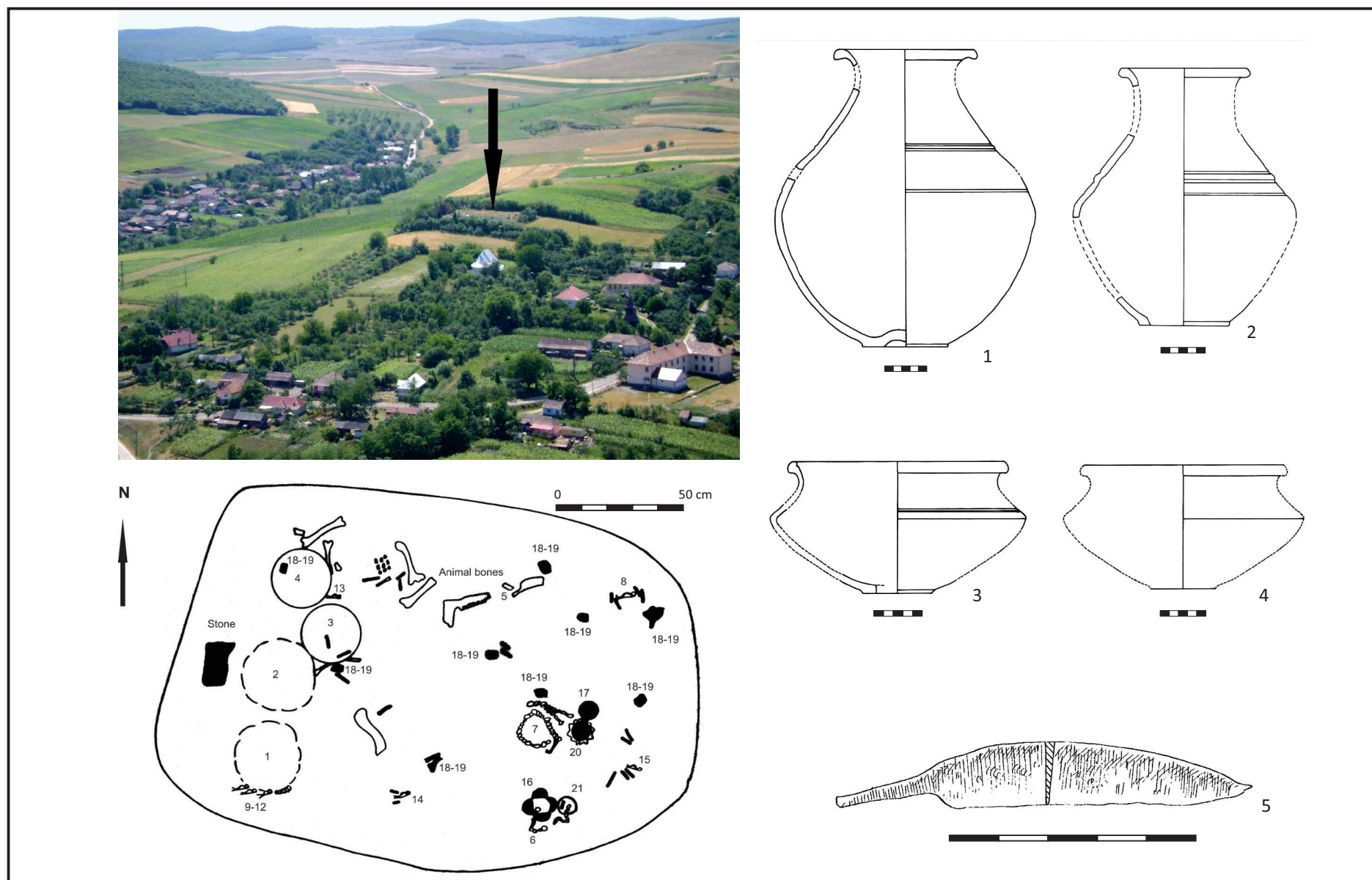
**Table 2.** Brežice, grave no. 56: Functional distribution of the sets of bodily ornaments and garment accessories.



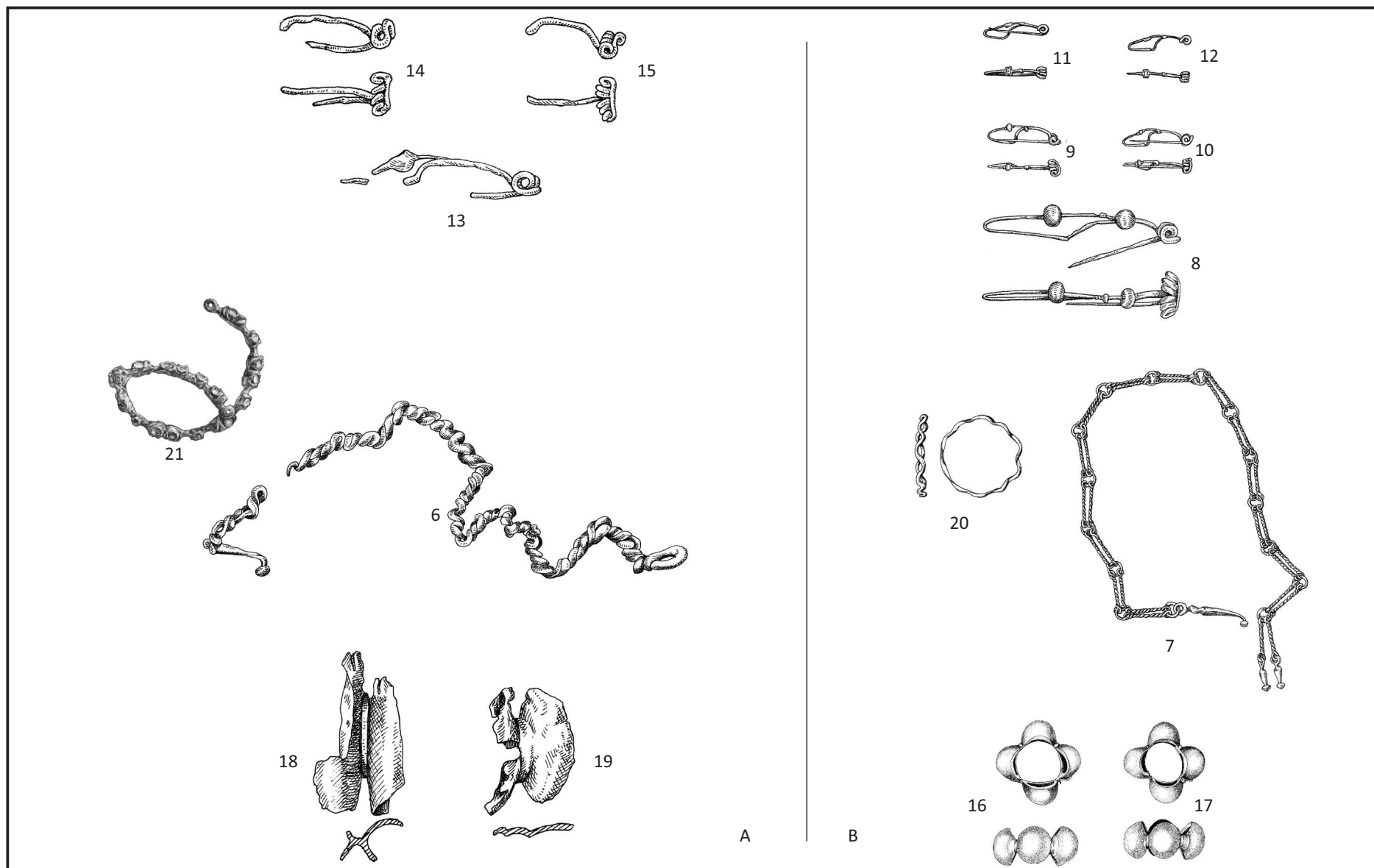
**Fig. 1.** Distribution of the burials containing pairs of anklets (after FURMAN 2012).



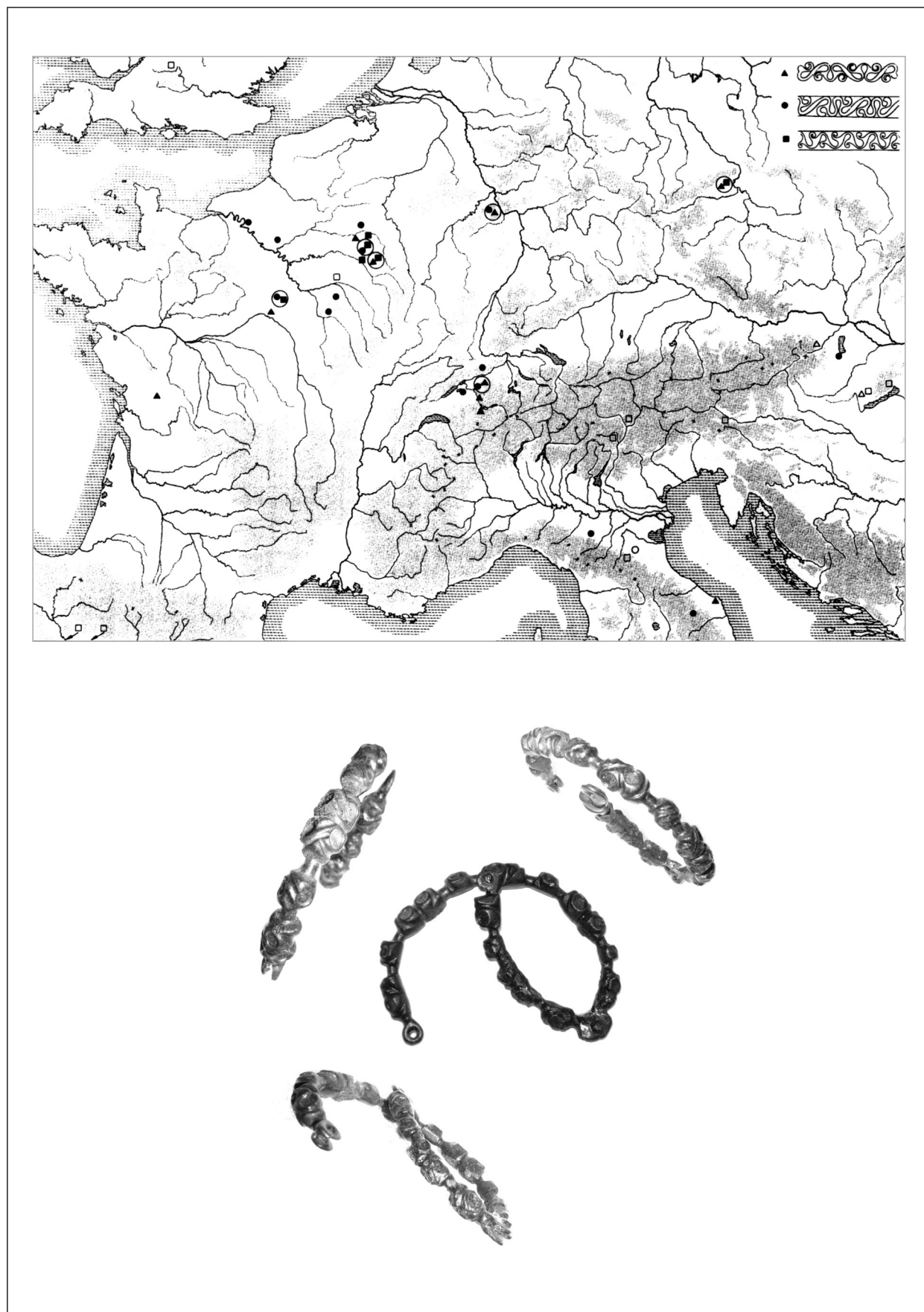
**Fig. 2.** Distribution of the graves containing tubular anklets (after BREZŇANOVÁ 2012).



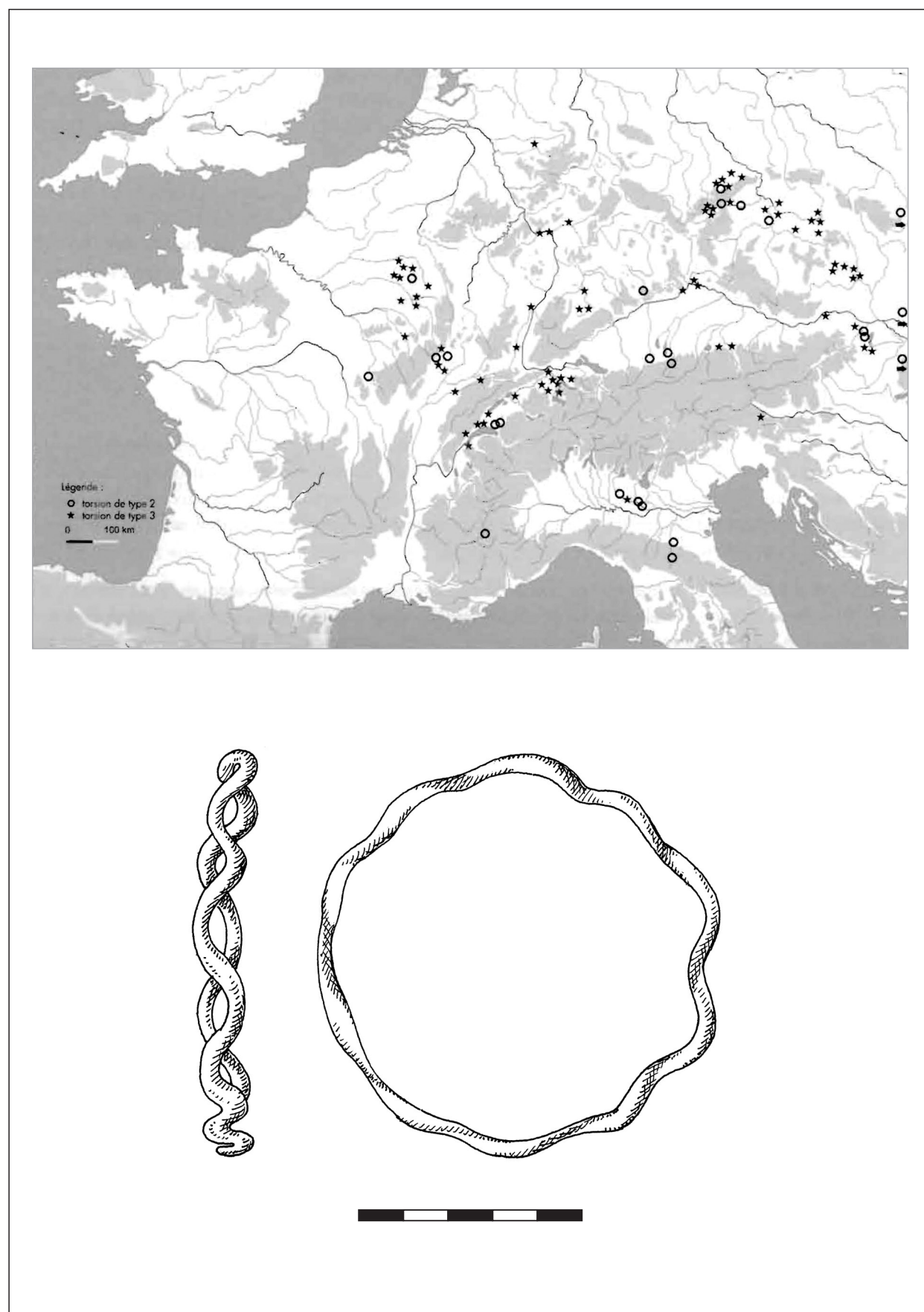
**Fig. 3.** Location of the Fântânele – Dâmbu Popii cemetery (left – above), plan of the grave no. 62 (left – below), ceramic vessels (1–4) and iron knife (5) from the inventory.



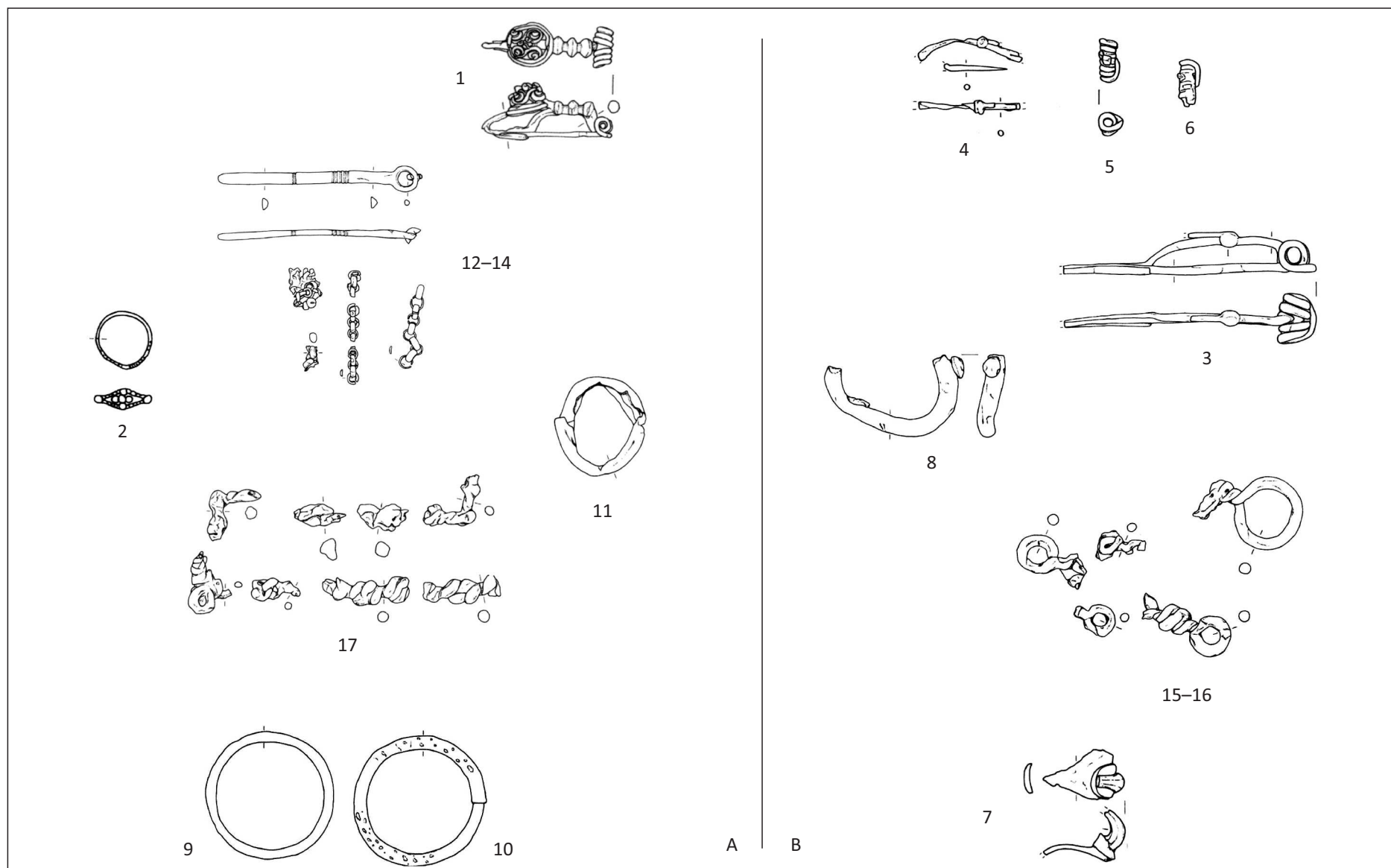
**Fig. 4.** Grave no. 62 from Fântânele – Dâmbu Popii. Metal elements of the costume 1 (A) and costume 2 (B). Numbering of the artefacts after RUSTOIU – MEGAW 2011. Different scales.



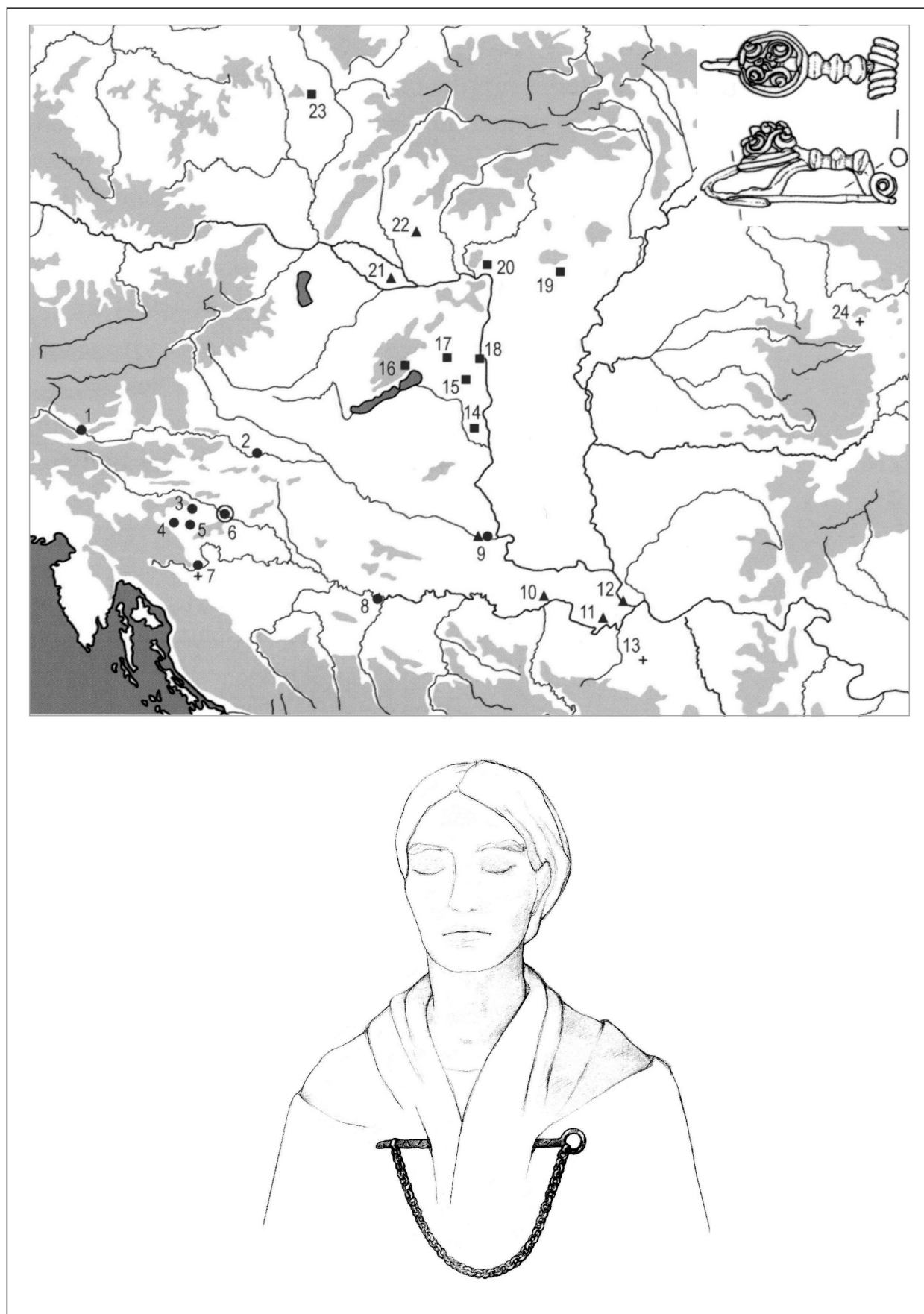
**Fig. 5.** Above: distribution of the Verger type A1-2 and B tendril motifs. Closed symbols: earlier period; open symbols: later period (after FREY 1995 and J. V. S. Megaw in RUSTOIU, MEGAW 2011). Below: decorated hinged iron bracelet from Fântânele – Dâmbu Popii, grave no. 62.



**Fig. 6.** Above: distribution of the undulating wire bracelets of the types 2 and 3 (after DELNEF 2003). Below: the undulating iron wire bracelet from Fântânele – Dâmbu Popii, grave no. 62.



**Fig. 7.** Grave no. 56 from Brežice. Metal elements of the costume 1 (A) and costume 2 (B). Numbering of the artefacts after JOVANOVIĆ 2011. Different scales.



**Fig. 8.** Above: distribution of the brooches of the middle LT scheme with pseudo-filigree decoration. Dots and triangles: south-eastern Alpine variants; rectangles: Hungarian variant (after JOVANOVIĆ 2011). Below: reconstruction of the use of cloak fastening pins of the Brežice type (after GUŠTIN 2003).

# OBSERVATIONS REGARDING THE WEAR OF FIBULAE IN POIENEȘTI-LUCAȘEUCA CULTURE

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*Iron Age. Their connections in Eastern and South-Eastern Europe offer many evidences for understanding history in this area.*

**Abstract:** *Poienеști-Lucașeuca culture is one of the most interesting cultural manifestation for the Moldavian Second*

*The aim of this paper is to analyze some aspects of fibulae used in the area of Poienеști-Lucașeuca culture.*

The fibulae have a special place among objects discovered in necropolises and settlements of Poienеști-Lucașeuca type. Used for fixing garments, but also as ornaments, the fibulae represent a category of archaeological material with particular chronological significance. They also provide very interesting information about some clothing habits practiced in old times. In this article, we propose to analyze some aspects of fibulae used in the area of Poienеști-Lucașeuca culture. Please note that we only rely on the findings of the cemeteries and isolated graves, because such pieces occur rarely in settlements and do not provide conclusive data on carriers of such artifacts.

But before analyzing this issue, we consider necessary to present, briefly, the typology of these objects. Please note that we dwell only on specimens discovered in the cemeteries. Prof. M. Babeș has already defined a typology for the fibulas discovered within the Poienеști-Lucașeuca culture. Yet, in the light of the new chronological frame attributed to the fibulas of the middle and late Latène type, we consider appropriate to reassess the systematization drafted by Prof. Babeș and to propose a new classification for the brooches discovered within the Poienеști-Lucașeuca culture areal. We specify that the principles that served as basis to the classification we conceived are of morphological nature.

**Type 1.** Iron or bronze fibulae with bilateral spring formed of four twists with large diameter and the chord is on the outside. The bow is short and strongly arched. The foot lies on the arch and is attached to it from the spring through a muff created by widening the foot extremity (fig. 1/1).

In the systematization conceived by M. Babeș, these fibulae form are registered as parts of type II.2<sup>1</sup>, while in the classification elaborated by Dragoș Măndescu it is included in the type 9<sup>2</sup>. In the area of Poienеști-Lucașeuca culture these samples are discovered in the necropolises from Poienеști and Borosești<sup>3</sup>.

<sup>1</sup> BABEȘ 1993, p. 92.

<sup>2</sup> MĂNDESCU 2010, p. 179.

<sup>3</sup> BABEȘ 1993, p. 92.

Such fibulae are, frequently, found within Púchov culture, where most of them are made of bronze and dated, particularly, in LT D1<sup>4</sup>. Such examples are discovered in the *Getae* necropolis from Zimnicea<sup>5</sup> and dated at the end of LT C1 – beginning of LT C2<sup>6</sup>. Similar fibulae are, also, found in the *Celtic* necropolis from Pişcolt<sup>7</sup>, where were dated within the same chronological limits<sup>8</sup>.

**Type 2.** Fibulae made of one solid iron wire piece, with bilateral spring formed of three or four twists and outer cord. The foot is twisted upon the arch and fastened to it through a muff made by widening the foot extremity. Their bow is slightly arched. The length varies between 5.7 and 10.9 cm (fig. 1/2). In J. Kostrzewski's<sup>9</sup> classification such fibulae are attributed to type A, while in the one elaborated by Mircea Babeş they are part of type II.1<sup>10</sup>.

In the area of Poienestî-Lucaşeuca culture such accessories are discovered in Buhăieşti<sup>11</sup>, Cîrligi<sup>12</sup>, Boroseşti<sup>13</sup>, Poienestî<sup>14</sup> and Liteni<sup>15</sup>.

Such clothing pins are frequently discovered in Jastorf culture area and there are dated at the end of LT C1 – LT C2<sup>16</sup>. Towards East of Oder, in the area of Przeworsk culture, the fibulae attributed by us to type 2 reveal phase A1 which corresponds to the first half of the 2<sup>nd</sup> century B.C.<sup>17</sup>. We have to remind that in the area of Przeworsk culture, as it is demonstrated by the discoveries from grave no. 120 from Kamieńczyk cemetery, such examples are found until phase A2/A3 of this culture<sup>18</sup>.

**Type 3.** The fibulae of this type are made of one metal spire with bilateral spring having, usually, four twists and the chord is on the outside. The arch is short and curved near the spring. The foot is twisted upon the arch and fastened to it by a muff made by widening the extremity of the foot. The fixation to the arch was done, usually, at its end, near the spring. Most such fibula type was made from iron or bronze, but also from sterling silver. The majority of the pieces had the length varying between 6 and 10.5 cm. Taking into account the angle between the bow and foot, where it turns upon the arch, we could made a delimitation in two variations:

- 3.a. Fibulae which have a form like a sharp angle between the two parts created by turning of the foot upon the body (fig. 1/3);
- 3.b. Fibulae which they form an almost right angle between the two parts created by turning of the foot on the arch (fig. 1/4).

In J. Kostrzewski's typology such fibulae are included in the type B<sup>19</sup>, while in M. Babeş's classification they are part of type II.3<sup>20</sup>. As it is indicated by the archaeological discoveries, this shape of the fibula is found, mostly, in the complexes of Poienestî-Lucaşeuca culture<sup>21</sup>, but there is also spread in other cultural environments of the European *barbaricum*<sup>22</sup>.

<sup>4</sup> PIETA 1982, p. 24.

<sup>5</sup> ALEXANDRESCU 1980, p. 30; MĂNDESCU 2010, p. 179.

<sup>6</sup> MĂNDESCU 2010, p. 179.

<sup>7</sup> NÉMETI 1989, p. 128, fig. 19/16; ZIRRA 1997, p. 117, fig. 24/21.

<sup>8</sup> ZIRRA 1997, p. 128.

<sup>9</sup> KOSTRZEWSKI 1919, p. 14–15, Abb. 1.

<sup>10</sup> BABEŞ 1993, p. 90–92.

<sup>11</sup> TEODOR 1957, p. 340.

<sup>12</sup> MITREA 1980, p. 433–434.

<sup>13</sup> BABEŞ 1993, p. 90–92.

<sup>14</sup> VULPE 1953, p. 318, 321, 366, fig. 108; BABEŞ 1993, p. 91, Taf. 32/19, 32/149c, 38/1.

<sup>15</sup> VULPE 1953, p. 318, 321, 366, fig. 108; BABEŞ 1993, p. 91, Taf. 32/19, 32/149c, 38/1.

<sup>16</sup> BRANDT 2001, p. 78, Abb. 14.

<sup>17</sup> DĄBROWSKA 1988, p. 17.

<sup>18</sup> DĄBROWSKA 1997, p. 34; DĄBROWSKA 2008, p. 29.

<sup>19</sup> KOSTRZEWSKI 1919, p. 17–18.

<sup>20</sup> BABEŞ 1993, p. 92.

<sup>21</sup> SMIRNOVA, MEGEI 1995, fig. 4/26c; BABEŞ 1993, Taf. 36/441e; TKAЧYK 1991, p. 51.

<sup>22</sup> DĄBROWSKA 1988, fig. 2e; RUSTOIU 1997, p. 35, fig. 19/5,8; BÂRCĂ 2006, p. 122, fig. 63/2.

Concerning the chronology of these fibulae, we note that T. Dąbrowska considers that the pieces with big dimensions are specific for the phase A1 of Przeworsk culture, while those smaller than 8 cm are typical to phase A2<sup>23</sup>. The same dating is proposed by J. Brandt for the objects discovered in the area of Jastorf culture<sup>24</sup>. In the area of Zarubinec culture the fibulae attributed by us to type 3 are considered specific for the second phase of this culture, which correspond to the last quarter of the 2<sup>nd</sup> – first half of the 1<sup>st</sup> centuries BC<sup>25</sup>. On the other hand, S. P. Pačková consider that, in the area of Zarubinec culture, these clothing pins were used between the end of 3<sup>rd</sup> and the first half of 1<sup>st</sup> centuries BC<sup>26</sup>. In the space populated by *Getae-Dacian* tribes such fibulae were dated in the second half of 2<sup>nd</sup> – first half of 1<sup>st</sup> centuries BC<sup>27</sup>.

**Type 4.** Fibulae with small dimensions (2.5–5 cm) made of one metal piece with bilateral spring usually formed in six twists and a chord placed on the outside. The bow is curved, while the foot is turned upon the arch and fixed to it through a muff made by flattening the foot extremity. Considering the foot shape, we are distinguishing two variations:

- 4.a. Objects with the foot forming a sharp angle where the body is turning (fig. 1/5);
- 4.b. Fibulae with the foot forming a right angle at the place where it turns on the arch (fig. 1/6).

In J. Kostrzewski's typology such pieces belong to the type H<sup>28</sup>, while in M. Babeș's classification they are part of type II.4<sup>29</sup>. In the area of Poieniști-Lucașeuca culture such fibulae have a high frequency. They were found in the necropolises from Dolineni<sup>30</sup>, Borosești<sup>31</sup> and Poieniști<sup>32</sup>.

Such clothing pins were discovered, quite often, in the area of „Germanic” cultures in Northern-Central Europe, where they were dated, particularly, in the LT D1 phase<sup>33</sup>. The same dating is proposed for the accessories found in the area of *Getae-Dacian*<sup>34</sup> and Zarubinec cultures<sup>35</sup>. Considering this data, we assume that the fibulae from Poieniști-Lucașeuca culture correspond to LT D1.

**Type 5** is represented by pieces with short and slightly shaped body. The foot turns upon the arch and is fastened to it through a muff made by flattening the extremity of the foot. Two of three bronze spheres are placed on the foot. The exactly number of the spires are unknown because of its poor preservation (fig. 1/7–8). In the area of Poieniști-Lucașeuca culture such examples are known only in the necropolis from Poieniști where there were discovered 20 fibulae with bronze spheres on the arch<sup>36</sup>.

Such clothing pins are found frequent in Jutland peninsula where they are dated in the stage IIA of pre-Roman Iron Age in Martens opinion<sup>37</sup>. Analogies are also known in Bornholm, Gotland, Fühnen and Rügen islands<sup>38</sup>. In that area was established the beginning of pre-Roman Late Iron Age which in absolute data it is corresponding to the last decade of 3<sup>rd</sup> c. B.C.<sup>39</sup>.

**Type 6.** Small fibulae (5.6–7 cm) with bilateral spring formed of 8–10 twists and the chord placed on the outside. The body is short and slightly shaped. The foot turns on the arch and it was fixed

<sup>23</sup> DĄBROWSKA 1988, p. 305.

<sup>24</sup> BRANDT 2001, p. 79.

<sup>25</sup> КАСПАРОВА 1984, p. 115–116.

<sup>26</sup> ПАЧКОВА 2006, p. 108.

<sup>27</sup> RUSTOIU 1997, p. 35.

<sup>28</sup> KOSTRZEWSKI 1919, p. 19.

<sup>29</sup> BABEȘ 1993, p. 92.

<sup>30</sup> СМІРНОВА 1981, рис. 3/6, 5/12, 6/5; SMIRNOVA, MEGEI 1995, fig. 5/35b, 7/44c, 7/46b.

<sup>31</sup> BABEȘ 1993, p. 92.

<sup>32</sup> BABEȘ 1993, p. 92.

<sup>33</sup> BRANDT 2001, p. 83; BOCKIUS, ŁUCZKIEWICZ 2004, p. 27; VÖLLING 2005, p. 103.

<sup>34</sup> RUSTOIU 1997, p. 35.

<sup>35</sup> КАСПАРОВА 1984, p. 116; ПАЧКОВА 2006, p. 91.

<sup>36</sup> BABEȘ 1993, p. 93.

<sup>37</sup> MARTENS 1996, p. 234, Abb. 12; MARTENS 1997, fig. 15.

<sup>38</sup> BIEGER 2003, p. 37–46; KEILING 2007, p. 120, Abb. 3/2.

<sup>39</sup> BIEGER 2003, p. 86–87, 90; BRANDT 2001, p. 85–87.

on it through a muff made by flattening the extremity of the foot (fig. 1/9). In the area of Poienеști-Lucașeuca culture these fibulae are rare, being known only 13 such examples<sup>40</sup>. Among them we mention those from Poienеști<sup>41</sup> and Borosești<sup>42</sup>.

We are pointing the fact that some similar examples are found frequently in the South-Alpine areas and in the North-Western part of the Balkan Peninsula<sup>43</sup>, where there are dated between the end of 2<sup>nd</sup> – first half of 1<sup>st</sup> centuries BC<sup>44</sup>.

**Type 7.** Fibulae made of one iron piece, with a bilateral spring formed of 10–16 spires and the chord placed on the outside. The arch is simple, thickened and bent in a right angle at the head, while catch plate is like a frame-shaped. Their length varies between 2,8 and 6 cm (fig. 1/10). As it is indicated by the archaeological discoveries, this kind of fibula is found frequent in the complexes of Poienеști-Lucașeuca culture. Among them, there are the examples coming from Borosești<sup>45</sup>, Poienеști<sup>46</sup> and Satu-Nou<sup>47</sup>.

In the area of Jastorf culture such fibulae are dated in the phase „A” of pre-Roman Late Iron Age, which is corresponding in absolute data to the end of 3<sup>rd</sup> – first quarter of the 2<sup>nd</sup> centuries B.C.<sup>48</sup>. In the *Celtic* world the fibulae attributed by us to type 6 are also found in the LT D1 stage<sup>49</sup>.

**Type 8.** Fibulae made of one metal wire with bilateral spring with four wires and the chord placed on the outside. The arch is strongly curved near the spring and it is usually circular in section. The catchplate is filled and it has a triangular or trapezoidal shape. All these objects are made of iron (fig. 1/11).

In J. Kostrzewski's systematization these examples are included into the type M<sup>50</sup>, while in that elaborated by M. Babeș they occur to the type III.2<sup>51</sup>. In the area of Poienеști-Lucașeuca culture such fibulae were discovered only in the necropolis at Dolineni<sup>52</sup>.

This fibulae type is found frequently in the area of Zarubinec culture dated with 1<sup>st</sup> century B.C.<sup>53</sup>. Such kind of pieces are found in the area of Oksyw and Przeworsk cultures where there were used during the 1<sup>st</sup> c. BC and probably on the beginning of the 1<sup>st</sup> century A.D.<sup>54</sup>.

**Type 9.** Fibulae made of one single metal piece with bilateral spring formed of four spires and the chord on the inside. The arch is curved from the spring, being usually circular in section. The catch-plate is full and it has a trapezoidal shape. All the pieces are made of iron (fig. 1/12).

In the area of Poienеști-Lucașeuca culture, these fibulae were discovered only in the cemetery in Dolineni<sup>55</sup>.

These clothing pins are found frequent in the North-Central European areas, where there are dated mostly in LT D2 phase<sup>56</sup>, which correspond to the second half of 1<sup>st</sup> century B.C. and the first quarter of 1<sup>st</sup> century A.D.

<sup>40</sup> BABEȘ 1993, p. 94.

<sup>41</sup> VULPE 1953, p. 340, 21, Taf. 32/69, 36/473c, 37/535c-d.

<sup>42</sup> BABEȘ 1994, p. 94.

<sup>43</sup> STÖCKLI 1975, p. 33, fig. 32–33.

<sup>44</sup> BOZIČ 1981, p. 328, table 2–3, fig. 4, 43–44.

<sup>45</sup> BABEȘ 1993, p. 96, taf. Taf. 8.80c.

<sup>46</sup> VULPE 1953, p. 350, fig. 180; BABEȘ 1993, Taf. 33/377c-d, 35/440e-f, 36/453c-d.

<sup>47</sup> BABEȘ 1993, Taf. 45/10b.

<sup>48</sup> HACHMANN 1960, Taf.1; ЕРЕМЕХКО, ЩУКИН 1998, p. 79.

<sup>49</sup> STÖCKLI 1975, p. 41.

<sup>50</sup> KOSTRZEWSKI 1919, Abb. 23.

<sup>51</sup> BABEȘ 1993, p. 96.

<sup>52</sup> SMIRNOVA, MEGEI 1995, p. 156.

<sup>53</sup> ПІАЧКОБА 2006, p. 84.

<sup>54</sup> VÖLLING 1994, p. 198; VÖLLING 2005, p. 123–124.

<sup>55</sup> SMIRNOVA, MEGEI 1995, p. 156.

<sup>56</sup> BRANDT 2001, p. 91; VÖLLING 2005, p. 124–129.

Resuming all the description we are written above, we have to remark that most of the fibulae, found in the area of Poieniști-Lucașeuca culture, are, typologically, identical to other cultural environments from both: North-Central Europe (Jastorf, Przeworsk, Oksyw cultures) and the Central and Eastern Europe (classical Getae-Dacian, Zarubinec and Sarmatian cultures), while chronologically most of them are corresponding to the LT C2 and LT D1 phases.

In the following pages we will attempt to analyze the way in which the fibulae were worn by the people in the Poieniști-Lucașeuca culture.

Before present time, 209 fibulae<sup>57</sup> have been attested within the funerary discoveries<sup>58</sup> of Poieniști-Lucașeuca culture, of types that were identified with higher or lesser precision. Among them, 90 pieces come from Poieniști<sup>59</sup>, 75 from Borosești<sup>60</sup>, 31 from Dolineni<sup>61</sup>, 7 from Lucașeuca<sup>62</sup> and just one piece were found in Cîrligi<sup>63</sup>, Buhăiești<sup>64</sup>, Grinčuk<sup>65</sup>, Kruglik<sup>66</sup>, Orheiul Vechi<sup>67</sup>, Satu-Nou<sup>68</sup> and Șipoteni<sup>69</sup>.

We have to remark that the anthropological analyses<sup>70</sup> were done in the case of the cemetery from Borosești. Therefore, we think that it is necessary to present first the context in which the fibulae were found in this necropolis. Afterwards, using the discoveries from Borosești as a base of discussion, we will try to analyze the contexts to the other necropolises and isolated burials.

In Borosești, the fibulae were found in 59 graves<sup>71</sup>, that means 40.06% from the total number of graves or 68.33% from those with inventory. From those 59 burials, 21 (35.59%) were attributed to women, 15 (25.42%) to men and in 24 (40.67%) are cases when it was not possible to identify the gender of the deceased (see the diagram 1).

In order to fix the clothes, was used one, two or even three fibulae. From those 46 graves which were contained just one object, 16 (34.78%) belonged to male deceased, 12 (26.086%) to women and in 18 (39.13%) cases it was not possible to determine the gender of the deceased (see the diagram 2). Therefore, the use of fibulae was specific to both women and men.

In 10 graves (M. 2, 7, 31, 49, 69, 70, 83, 86, 105 and 117) there were discovered two fibulae, six belonging to female, the other four are undefined. In three graves (M 13, 52 and 84), two belonging to adult females, there were found three fibulae. Therefore, we consider very probably that the use of three fibulae was specific to women only.

It is also worth mentioning that in five graves from Borosești (M. 49 (type 4), 69 (type 4), 70 (7), 83 (type 4) and 86 (4)) there were discovered identical fibulae which were, probably, pairs of fibulae. In other four cases (M. 2, 7, 105, 117) the clothing pins belonged to different types, but in all these graves there were found only two types of fibulae (type 3 and 4). This allows us to assume that sometimes these pieces were used together. Moreover, the combination of these types of fibulas were found in other two graves (M. 13 and 84), where three fibulae were discovered.

<sup>57</sup> We have to remark that this statistics are approximate as far as the archaeological excavations conducted at the eponym necropolis from Poieniști by M. Babeș are still innovative after 1981. We are reminding that this cemetery investigated almost entirely has 275 graves (BABEȘ, MIRIȚOIU 2011, p. 105) but only 115 burials are published (VULPE 1953, p. 310–433; BABEȘ 1993, cat. 71, p. 211–213).

<sup>58</sup> Please note that we have analyzed the objects coming from the graves, but not those discovered in the adjacent cultural layer.

<sup>59</sup> VULPE 1953, p. 422–424; BABEȘ 1993, p. 90–96.

<sup>60</sup> BABEȘ 1993, p. 90–96.

<sup>61</sup> СМІРНОВА 1981, p. 193–207; SMIRNOVA, MEGEI 1995, p. 133–159.

<sup>62</sup> ФЕДОРОВ 1957, p. 51–63.

<sup>63</sup> MITREA 1980, p. 433–434.

<sup>64</sup> TEODOR 1957, p. 339–342.

<sup>65</sup> ПАЧКОВА 1979, p. 113–114.

<sup>66</sup> ТИМОЩУК, ВІНОКУР 1962, p. 75–76.

<sup>67</sup> ТКАЧУК 1991, p. 51–52.

<sup>68</sup> BABEȘ 1993, p. 215.

<sup>69</sup> СЕРГЕЕВ 1956, p. 135–139.

<sup>70</sup> Anthropological analyses were done by N. Mirițoiu.

<sup>71</sup> BABEȘ 1993, p. 184–192, cat. 8.

Summarizing the above, we can notice that the use of one fibulae at Borosești was specific to both women and men, while the graves with more fibulae discoveries belong more likely to females.

Taking into consideration these conclusions, we will try to analyze the situation from other necropolises of Poienеști-Lucașeuca type.

As mentioned before, in the cemetery from Poienеști were found 90 fibulae, whose type could be identified. These appeared in 55 graves<sup>72</sup>, which means 47.82% from the total number of published graves.

We had seen that at Poienеști were used one, two, three or more fibulae to fix the clothing. In the case of the necropolis in Borosești, from those 55 graves with such accessories, 36 burials had one fibula, eight had two, other eight funerary complexes had three fibulae and in three graves (M. 147, 149 and 328) were found more than three clothing pins (see diagram 3)<sup>73</sup>. The graves which contained only one fibula, we think that there can be attributed, by analogy, to deceased both male and female.

Please note that at Poienеști, more precisely in graves no. 3, 121, 392, 394 and 396, identical fibulae were discovered<sup>74</sup>, which were, probably, pairs of fibulae. In other three cases (M. 84, 261 and 390) the accessories belong to different types.

Concerning the graves with three and more clothing pins, we attest the tendency to associate fibulae of type 3 with type 5 (M. 48 and 329) and those of type 1 with type 7 (M. 149 and 328). Given the results we have on the cemetery in Borosești, we assume that in Poienеști the wearing of two and more fibulae was specific to women only.

Another necropolis with an impressive number of fibulae is the one from Dolineni. From those 58 graves which were discovered, 31 fibulae were found of whose type could be identified<sup>75</sup>.

At Dolineni, from those 26 graves in which were discovered such accessories 22 funerary complexes contained one piece, the other four graves (M. 10, 22, 28, 31 and 39) had two (diagram 4). As in the cases of the cemeteries from Borosești and Poienеști, we assume that the graves with one piece must be attributed to the deceased of both sexes, while the remaining four belong to women.

At the eponym cemetery from Lucașeuca, the clothing pins, whose type could be precisely identified, were discovered in 5 graves. In four of these (M. 9, 12, 20 and 21) was found one fibula<sup>76</sup>, while in grave no. 10 were found 2 such pieces<sup>77</sup>. Given the results of anthropological analyses from Borosești cemetery, we assume that the graves containing just one fibula could be attributed to both genders, while the grave no. 10 belongs, probably, to a female. In support of this assumption are the discoveries from the grave no. 10 from Lucașeuca, associated with the fibulae, which are specific to women costume (bracelets, earrings, a bead and a bone spindle)<sup>78</sup>.

Regarding the other funerary findings, in which were found just one piece – Buhăiești (M. 1)<sup>79</sup>, Cîrligi<sup>80</sup>, Grinčuk<sup>81</sup>, Kruglik<sup>82</sup>, Orheiul Vechi<sup>83</sup>, Satu-Nou<sup>84</sup> and Șipoteni<sup>85</sup> – it is difficult to establish the gender of the deceased. However, it is likely that graves from Cîrligi, Kruglik and Satu-Nou could belong to women, as at Cîrligi<sup>86</sup> and Satu-Nou<sup>87</sup>, where the fibulae were associated with fragments of

<sup>72</sup> VULPE 1953, p. 422–424; BABEȘ 1993, cat. 71, p. 208–213.

<sup>73</sup> VULPE 1953, p. 363, 366, 406; BABEȘ 1993, p. 210.

<sup>74</sup> VULPE 1953, p. 316, 353; BABEȘ 1993, p. 211.

<sup>75</sup> СМІРНОВА 1981, p. 193–207; SMIRNOVA, MEGEI 1995, p. 133–159.

<sup>76</sup> ФЕДОРОВ 1957, p. 55–58.

<sup>77</sup> ФЕДОРОВ 1957, p. 55.

<sup>78</sup> ФЕДОРОВ 1957, p. 55–56.

<sup>79</sup> TEODOR 1957, p. 339–342.

<sup>80</sup> MITREA 1980, p. 433–434.

<sup>81</sup> ПАЧКОВА 1979, p. 113–114.

<sup>82</sup> ТИМОЩУК, ВІНОКУР 1962, p. 75–76.

<sup>83</sup> ТКАЧУК 1991, p. 51–52.

<sup>84</sup> BABEȘ 1993, p. 215.

<sup>85</sup> СЕРГЕЕВ 1956, p. 135–139.

<sup>86</sup> MITREA 1980, p. 433–434.

<sup>87</sup> BABEȘ 1993, p. 215.

chains, while at Kruglik<sup>88</sup> the clothing pin was discovered together with a bead and a buckle. These pieces are considered specific to women clothing<sup>89</sup>.

In conclusion, we can affirm that the carriers of Poieniști-Lucașeuca culture practice certain main wear rules. Thereby, the wear of one fibula was specific to both genders, while the wear of two and more clothing pins was characteristic only for to women. In the case of the graves with one fibula, the piece which accompanies it could determine archaeologically the gender of the deceased. So, when fibulae are associated with ornaments, spindles or ceramics polishing stones the grave should be attributed to a woman. In the case when the clothing pin is discovered with tweezers, then the grave should be considered as belonging to a male.

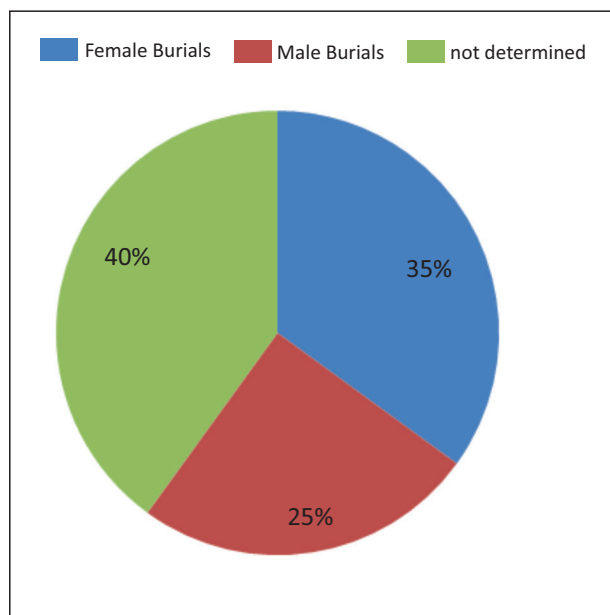


Diagram 1

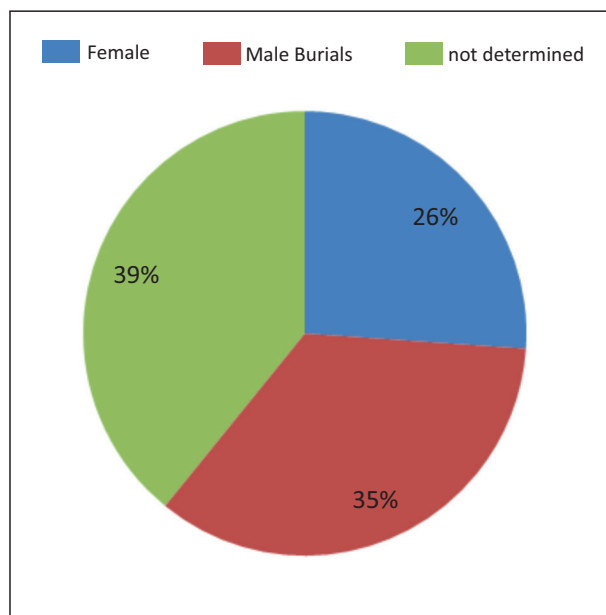


Diagram 2

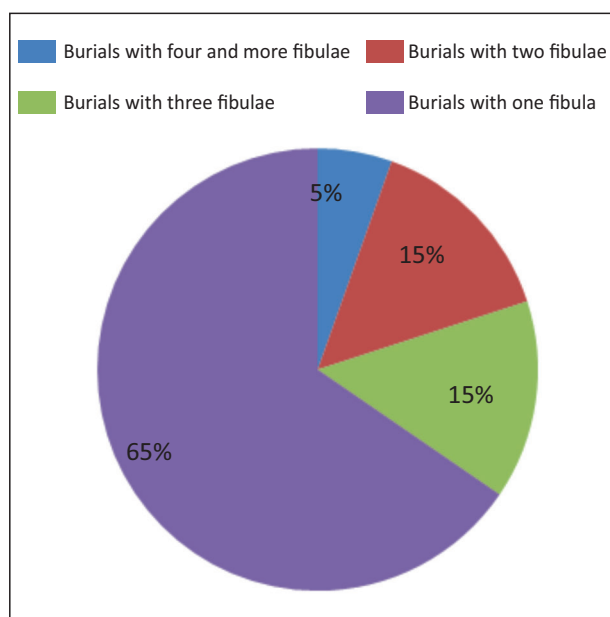


Diagram 3

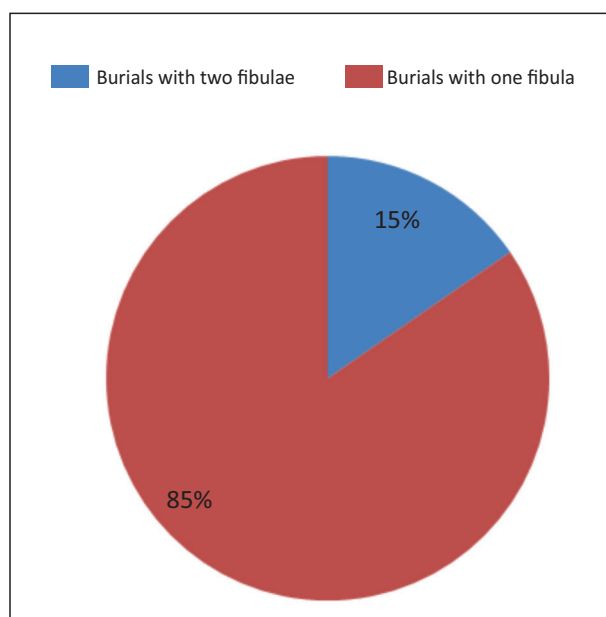


Diagram 4

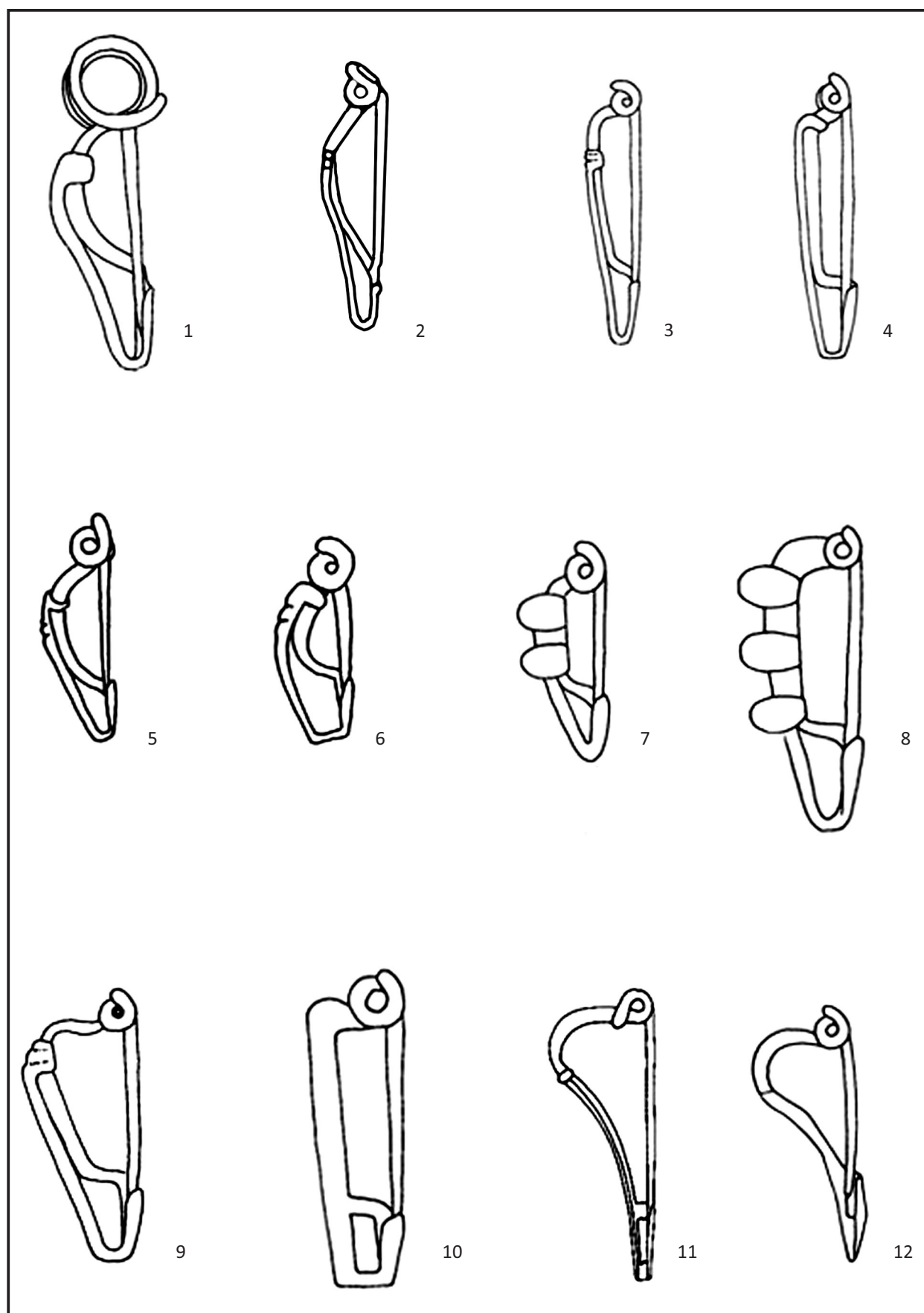
<sup>88</sup> ТИМОЩУК, ВІНОКУР 1962, р. 75–76.

<sup>89</sup> BABEȘ 1993, р. 44.

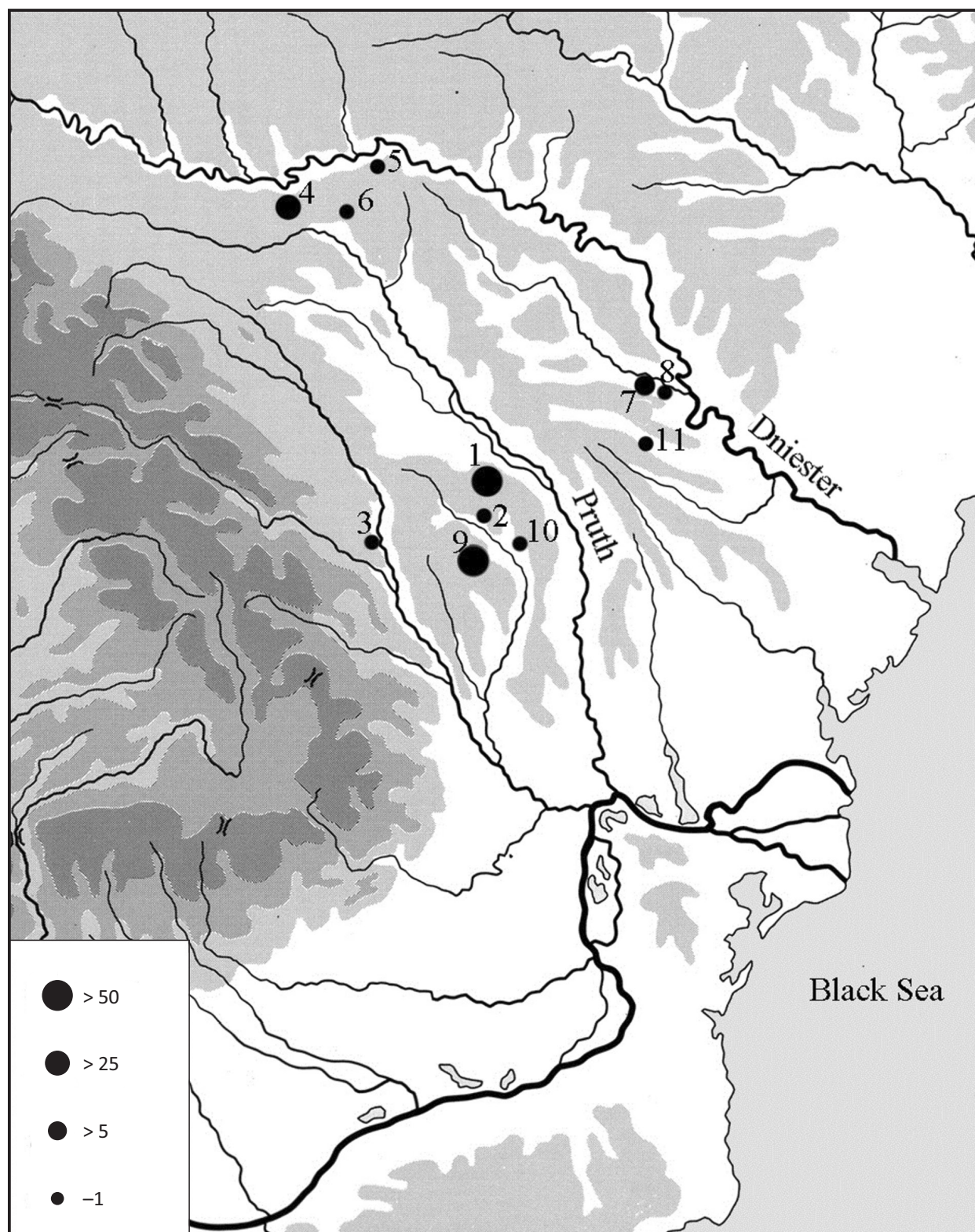
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**Fig. 1.** The typology of the fibulae use in the area of Poieniști-Lucașeuca Culture. 1 – Type 1; 2 – Type 2; 3 – Type 3a; 4 – Type 3b; 5 – Type 4a; 6 – Type 4b; 7–8 – Type 5; 9 – Type 6; 10 – Type 7; 11 – Type 8; 12 – Type 9 (after BABEȘ 1993).



**Fig. 2.** Funerary finds with fibulae in Poieniști-Lucașeuca Culture. 1. Borosești, jud. Iași, Romania; 2. Buhăiești, jud. Iași, Romania; 3. Cîrligi, jud. Bacău, Romania; 4. Dolineni, Černovickaja Obl., Ukraine; 5. Grinčuk, Hmelnickaja Obl., Ukraine; 6. Kruglik, Černovickaja Obl., Ukraine; 7. Lucașeuca, r. Orhei, R. of Moldova; Orheiul Vechi, r. Orhei, R. of Moldova; 9. Poieniști, jud. Vaslui, Romania; 10. Satu-Nou, jud. Vaslui, Romania; 11. Șipoteni, r. Călărași, R. of Moldova.



# DACIAN OSSEOUS MATERIALS ARTEFACTS DISCOVERED AT ARDEU-“CETĂŢUIE”, HUNEDOARA COUNTY. DECORATED RED DEER ANTLER PLATE\*

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**Keywords:** Ardeu, belt plate, bone artefacts, Dacia, Geto-Dacians, Hunedoara County, knife handle, plate, red deer artefacts, Second Iron Age, Transylvania.

**Abstract:** The researches that were done in the Dacian hillfort from Ardeu have documented a practice of an ancient craft, in a domestic or specialised form. This craft consists in manufacturing artefacts from bone and antler (osseous materials industry).

There are 44 bone and antler objects from Ardeu, discovered both from the cultural layer and from complexes (the blacksmith's workshop – that was partially excavated; a funerary or cultic complex). The artefacts are included in some categories as it follows: raw materials, blanks, debris, finite objects, wastes, pieces deteriorated by use. The following typological categories are represented: accessories for tools and weapons – red and roe deer antler handles for knives or rasps (32); handle plates for usual knives or fighting ones (*sicae*) (3); weapons: antler arrowhead (1); various accessories, adornments and game pieces: antler disc (1); bead made of fish vertebrae (*carp?*) (1); bone die – piece imported from the Roman area (1). Cut horns of cattle (3) and caprine (2) are also included in this assemblage.

Until now the most important artefact made of animal osseous materials from Ardeu is a decorated plate unique until now in the Dacian territory from intra-Carpathian

chain area. In the recent catalogue of the collection the object has the code ARC 1. This was discovered in 200, in a cultic or funerary context, together with several pieces of military equipment and other archaeological pieces.

It is made of red deer antler (beam fragment, compacta tissue) using the technical procedures of splitting, chopping and abrasion. According to the hypothetical solution proposed for its reconstruction, the edges could have been both rounded, or one rectilinear and the other rounded. The plate has three preserved perforations used for fastening with rivets.

The engraved ornamentation comprises double circles with a central dot, bands of hatches lines and notches on the edges. The ornament, probably, continued in a symmetrical manner on the unpreserved part. The double circles were, probably, obtained using two small metal compass-type instruments, with different diameters. The dot was the first engraved with the point of a knife, then the small circle was done and finally, the big circle.

The microscopic analysis of the ornamentation elements allowed us to propose the following sequence of operations: 1 the notches on the edges, 2 perforations, 3 circles, 4 bands with hatches lines.

The object was, probably, used as plate for a knife handle, end of belt or ornamental plate set on a piece of leather.

As analogies we may mention two pieces discovered in the Getic settlements from Poiana, Galaţi County.

\* This article is a enriched variant of the text and illustration published in the catalogue: FERENCZ, BELDIMAN 2012; FERENCZ 2012c; BELDIMAN 2012b; BELDIMAN ET AL 2012b, p. 73–76, 226–228.

## THE DACIAN HILLFORT OF ARDEU

Ardeu village, part of Balşa Commune, is placed in the North-Eastern part of Hunedoara County (South-Western Transylvania). The entire area has a hilly aspect and the rocky steep walls that open numerous natural cavities offer a particularity to the landscape. The hill called “Cetățuie” is situated at 17 km of Mureș Valley and its position allows the control of the access road to the Apuseni Mountains. This was probably one of the reasons for which the hillfort was placed there. The proximity to the main way of access from the South of the intra-Carpathian area, probably, facilitated the provision of supplies (pl. I/1–2).

At the end of the 19<sup>th</sup> century, the hillfort was mentioned in the archaeological literature<sup>1</sup>, but during the 20<sup>th</sup> century it was rarely mentioned. The first stage of research made in the area is marked by Larisa Nemoianu's (National Museum of Romanian History of Bucharest) excavations. In 1973 she preceded an archaeological survey<sup>2</sup>. The reduced scale of the excavations produced certain doubts that determined the way in which the site was perceived during the '70s and '80s of the past century. In this respect, we have to mention the fact that Ioan Glodariu considered it a Dacian hillfort<sup>3</sup> and a few years later, Ion Horațiu Crișan considered it a fortified settlement<sup>4</sup>.

The doubt regarding the hillfort's inclusion in one of the two categories is stated in a paper published in 1989<sup>5</sup>. For the same reason, István Ferenczi, after quoting G. Téglas, believed that the fortification walls were made of limestone blocks<sup>6</sup>.

Lately, due to the interest manifested by the Museum of Dacian and Roman Civilisation of Deva, the Dacian hillfort of Ardeu became increasingly known<sup>7</sup>. It seems that it was a nobleman's residence and it functioned from the first half of the 1<sup>st</sup> century BC until the wars with the Romans from the beginning of the 2<sup>nd</sup> century AD<sup>8</sup>.

The fortified place made of local stone wall stuck with clay, strengthened and raised with wood structures, surrounded the top of the hill known nowadays as “Cetățuie”. The area was divided into two parts. The Northern one, where a rocky knoll dominates the entire plateau, was designated to be the nobleman's residence. “The Palace” or according to the terminology proposed by Ioan Glodariu, the tower dwelling – because of its resemblance to the medieval keeps – dominated the entire plateau due to the fact that it was built on the above mentioned knoll<sup>9</sup>. The Southern part was designed for the members of the court, warriors and their families<sup>10</sup>.

In the Western part, the traces of a workshop were discovered. Objects of iron, bronze, but also of bone and antler were manufactured there<sup>11</sup>. It seems that this was not the only workshop belonging to a craftsman who manufactured bronze objects. The traces of another workshop were identified at the base of the Southern slope<sup>12</sup>.

The access into the hillfort was, probably, done from the South-Western part of the upper plateau, but, until now, there are no clear evidences in this respect. According to the local inhabitants, who kept the lambs for weaning in that part, the access was done on a small pathway that came from the Northern slope. It surrounded the hill through the Western part, then it went up a gentle slope that was arranged for this purpose. In the end, the pathway got in the South-Western part of the plateau where the access gate was supposed to have been.

<sup>1</sup> TÉGLAS 1885.

<sup>2</sup> NEMOIANU, ANDRIȚOIU 1975.

<sup>3</sup> GLODARIU 1983, p. 82.

<sup>4</sup> CRIȘAN 1986, p. 149.

<sup>5</sup> DAICOVICIU ET AL 1989, p. 52.

<sup>6</sup> DAICOVICIU ET AL 1989, p. 55.

<sup>7</sup> FERENCZ, ROMAN 2010, p. 174; FERENCZ 2012a, p. 70; FERENCZ 2012b.

<sup>8</sup> FERENCZ, ROMAN 2010, p. 174–175.

<sup>9</sup> GLODARIU 1983, p. 25–29.

<sup>10</sup> FERENCZ 2007.

<sup>11</sup> FERENCZ ET AL 2005, FERENCZ ET AL 2010, FERENCZ ET AL 2011; FERENCZ 2012b.

<sup>12</sup> FERENCZ, BODO 2003.

Numerous artefacts discovered during several archaeological campaigns (2001–2011) are evidences of an intense living of the hillfort during the Dacian Kingdom. Vestiges from other historic epochs were also discovered<sup>13</sup>, the weapons<sup>14</sup>, the adornments<sup>15</sup> and the pieces purchased from Roman Empire regions<sup>16</sup> are some of the objects discovered at Ardeu and published these last years<sup>17</sup>.

## DACIAN OSSEOUS MATERIALS ARTEFACTS

The archaeological excavations done in the Dacian hillfort from Ardeu, in the past decade, led to the discovery of an important archaeozoological assemblage (bones, antlers, horns, teeth of domestic and wild mammals). Their first examination revealed the fact that the domestic species such as bovines, caprine, pigs and horses are preponderant and wild species such as the wild boar, red deer and roe deer are also present, but they have minor importance in the animal economy<sup>18</sup>.

The study of faunal remains allowed us to identify the anatomical pieces that preserve the traces of technical intervention that attest the processing of the carcasses and their butchery. These were obtained due to their usage as food (muscular tissues, intestines, marrow, fat) or because of the extraction of certain anatomical parts used for manufacturing artefacts (bones, antlers, teeth, hides, sinews etc.).

The traces produced during the butchering of the carcasses are the following: traces of impact (bones fragmentation for marrow extraction); traces resulted from the disarticulation, removal of the meat from the bones and bone fragmentation (fracture, cutting); traces of burning produced during the cooking process; traces of skinning (fine cutting at the level of the skull and at the epiphyses of the long bones).

These types of butchering marks done with an axe are preserved also by the faunal remains from Ardeu (limb bones, ribs, jaws). Their future complete analysis, with a statistical study will offer us some clues regarding the application of some butchering techniques that were standardized, experienced, that had taken into account the tradition, the abilities of the person who executed the operation etc. These could be compared with the ones that are produced today.

The researches that were done in the Dacian hillfort from Ardeu have documented a practice of an ancient craft, in a domestic or specialised form. This craft consists in manufacturing artefacts from bone and antler (osseous materials industry)<sup>19</sup>.

There are 44 bone and antler objects from Ardeu, discovered both from the cultural layer and from complexes (the blacksmith's workshop – that was partially excavated; a funerary or cultic complex). The artefacts are included in some categories as it follows: raw materials, blanks, debris, finite objects, wastes, pieces deteriorated by use.

The following typological categories are represented: *accessories for tools and weapons* – red and roe deer antler handles for knives or rasps (32); handle plates for usual knives or fighting ones (*sicae*) (3); *weapons*: antler arrowhead (1); *various accessories, adornments and game pieces*: antler disc (1); bead made of fish vertebrae (carp?) (1); bone die – piece imported from the Roman area (1). Cut horns of cattle (3) and caprine (2) are also included in this assemblage.

In the inventory of the blacksmith's workshop, along with manufactured deer antlers, we may include several cattle long bones with traces of cut, splitting and fracturing. A wild boar tusk, taken out from the mandible, is also included here; this could have been used as raw material in order to manufacture some plates or beads.

The study of these artefacts takes into account the actual methodology of the domain. This follows the complete analysis of the artefacts' characteristics: raw material, shape, dimensions,

<sup>13</sup> FERENCZ, ROMAN 2010, p. 175.

<sup>14</sup> FERENCZ, DIMA 2009; FERENCZ, GURGU-ȚÂRDOIU 2009.

<sup>15</sup> FERENCZ 2003; FERENCZ 2006.

<sup>16</sup> FERENCZ 2005.

<sup>17</sup> FERENCZ, BELDIMAN 2012.

<sup>18</sup> BELDIMAN ET AL 2012a.

<sup>19</sup> FERENCZ, BELDIMAN 2012; BELDIMAN 2012b.

manufacture procedures, way of use. All these are done by applying optical and digital microscopy which helped the observation and the interpretation of various traces produced during the manufacturing or utilisation chain<sup>20</sup>.

There are 7 so-called “special” pieces. Three of them are plates made of red deer antler (two decorated). Other pieces are: conic arrowhead made of the terminal part of a red deer tine, disc made of red deer antler, bead made of fish vertebra (carp?), bone die?

The Dacians from Ardeu paid a special attention to the manufacture of red and roe deer antlers which were obtained by their gathering from wild or by animal hunting. This type of activity is attested in the blacksmith’s workshop as a complementary occupation to the iron tools production. This proves that finite objects were produced there in order to be locally used or to be used for trade. This is one of the rare situations of this type identified in a Geto-Dacian settlement. The use of red deer tines and roe deer beam was preferred due to their superior mechanical properties and due to the advantage offered by their anatomical shapes and dimensions which were very close to the ones of the finite products. In the assemblage from Ardeu, some unworked pieces, blanks, debris, wastes and finite ones have been preserved. The detachment of the raw materials was done using axe chopping or saw cutting; the surfaces and the edges were shaped using a very precise procedure of chopping. The longitudinal perforation was drilled after a previous carving of the piece. A fragmentary piece (debris? fragmented by usage) had a perforation at one of the edges that was made in the lateral part using the knife chopping. It seems that this served to fix the hanging wire<sup>21</sup>.

At Ardeu, the manufacture of cattle and caprine horns is also attested. The keratinized sheath that covers the horn core was taken off in order to be used as a drinking vessel or as raw material for manufacturing ornamental accessories for various objects of wood or metal. An evidence in this respect may be the discovery of the entire cattle horn cores detached of the skull and of segments of caprine horn cores cut with a saw, with a round shape<sup>22</sup>.

### RED DEER DECORATED PLATE

Until now the most important artefact made of animal osseous materials is a decorated plate unique, until now, in the Dacian territory from intra-Carpathian chain area. In the recent catalogue of the collection the object has the code ARC 1.

This was discovered in 2001, in a cultic or funerary context, together with several pieces of military equipment. It comes from a specialised workshop and, because of its deterioration in Antiquity, it was preserved in a fragmentary condition<sup>23</sup>.

It is made of red deer antler (beam fragment, *compacta* tissue) using the technical procedures of splitting, chopping and abrasion. According to the hypothetical solution proposed for its reconstruction, the edges could have been both rounded, or one rectilinear and the other rounded. The plate has three preserved perforations used for fastening with rivets.

The engraved ornamentation comprises double circles with a central dot, bands of hatches lines and notches on the edges. The ornament, probably, continued in a symmetrical manner, on the unpreserved part. The double circles were, probably, obtained using two small metal compass-type instruments, with different diameters. The dot was the first engraved with the point of a knife, then the small circle was done and finally, the big circle (pl. II–VIII).

The microscopic analysis of the ornamentation elements allowed us to propose the following sequence of operations: 1 the notches on the edges, 2 perforations, 3 circles, 4 bands with hatches lines (pl. II/3; IX/1–11).

<sup>20</sup> BELDIMAN 2012a.

<sup>21</sup> FERENCZ 2010; BELDIMAN ET AL 2012a.

<sup>22</sup> BELDIMAN ET AL 2012a.

<sup>23</sup> PESCARU ET AL 2002, p. 42; FERENCZ, DIMA 2009, p. 21, 24–25, 33, fig. 3/2; FERENCZ 2010, p. 79, 87, pl. II/1–2; BELDIMAN ET AL 2012a; BELDIMAN ET AL 2012b; BELDIMAN ET AL 2013; BELDIMAN 2012b.

The object was, probably, used as plate for a knife handle, end of belt or ornamental plate set on a piece of leather (pl. IX/12–14; pl. X).

As analogies we may mention two pieces discovered in the Getic site of Poiana, Galați County<sup>24</sup>.

## CATALOGUE SHEET

The standard record presents the data regarding the artefact as it follows<sup>25</sup>:

### CODE • TYPE

- Category (tools, weapons, adornments, raw materials, accessories etc.) • Institution/Collection • Inventory number • Context • Dating (epoch, period, culture, centuries) • Plate
- Raw material.
- Status of conservation (entire, fragmentary piece, fragment).
- Description (morphology, technical data regarding the manufacture, use-wear traces, functionality etc.).
- Dimensions (mm).
- Bibliography/Unpublished piece.

### ARC 1 • PLATE

• Weapons Accessories • MCDR Deva • 48608 • 2001 TIIA Sector 3 SII M8 – 0.40 m • 1st century BC • Pl. II-X.

- Red deer antler. Beam fragment. Compact tissue.
- Fragmentary piece.

• Small artefact probably used as a plate for knives, for a belt end or a plaque. It has three perforations probably used for fixing with rivets. On the superior side it is decorated with geometrical elements that are engraved and notched: three double circles with a central dot, four stripes filled with short oblique lines and oblique notches on the edges. Probably the ornamentation was symmetrically continued on the unpreserved area that was fractured in Antiquity. According to data of microscopic analysis, the following stages of decoration are presumed: 1. notches on the edges; 2. perforations (1–2–3); 3. double circles with central dots (1–2–3); 4. shaded stripes (1–2–3–4). The use-wear traces are: blunted and polished surfaces; superficial, irregular grooves.

• Length 48.10; width of mesial part 24.30; thick of mesial part 3.77; diameter of exterior circles 8.86/8.70; diameter of interior circles 5.81; diameter of dots 1.5; diameter of perforation on superior side 3.5; diameter of perforation on inferior side 3.2; width of stripes 3.1–3.7.

• PESCARU ET AL 2002, p. 42; FERENCZ, DIMA 2009, p. 21, 24–25, 33, fig. 3/2; FERENCZ 2010, p. 79, 87, pl. II/1–2; BELDIMAN ET AL 2012a; BELDIMAN ET AL 2012b, p. 226–228; BELDIMAN 2012b, p. 51.

<sup>24</sup> VULPE, TEODOR 2003, p. 562–563, fig. 83/4 and fig. 84/2.

<sup>25</sup> BELDIMAN ET AL 2012b, p. 73–76, 226–228.

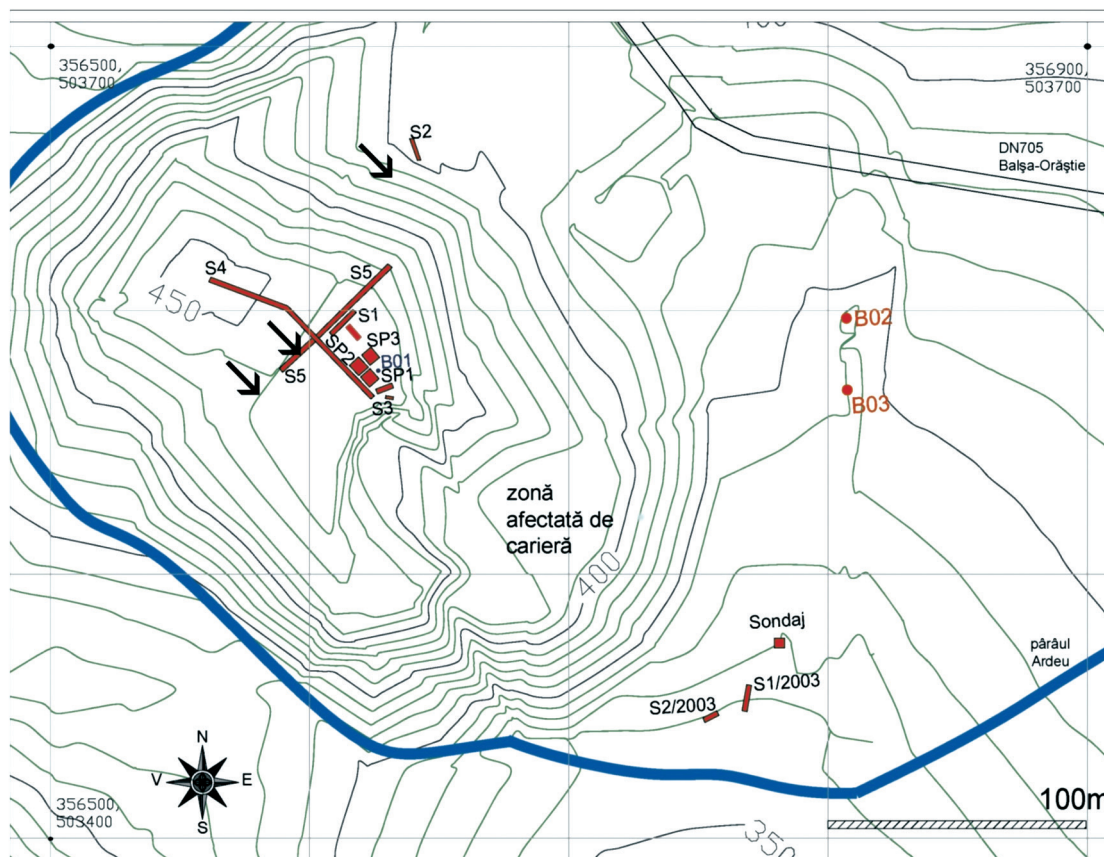
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**Pl. I.** 1. Ardeu – “Cetățuie”. General view from north-west. Photo Iosif Vasile Ferencz. After FERENCZ, BELDIMAN 2012, p. 145, fig. 64. 2. Ardeu – “Cetățuie”. General plan made by Maria Magdalena Ștefan, S.C. Digital Domain S.R.L. 2004. After FERENCZ, BELDIMAN 2012, p. 148, fig. 65.



**Pl. II.** 1–2. Ardeu-“Cetățuie”. Red deer antler plate: general views of superior and inferior sides. Photo Corneliu Beldiman. 3. Red deer antler plate: engraving decoration – conventional numerical designation. C circle; B band; Pf perforation; Lr residual engraved line.



**Pl. III. 1–6.** Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



**Pl. IV.** 1–5. Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



**Pl. V.** 1–4. Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



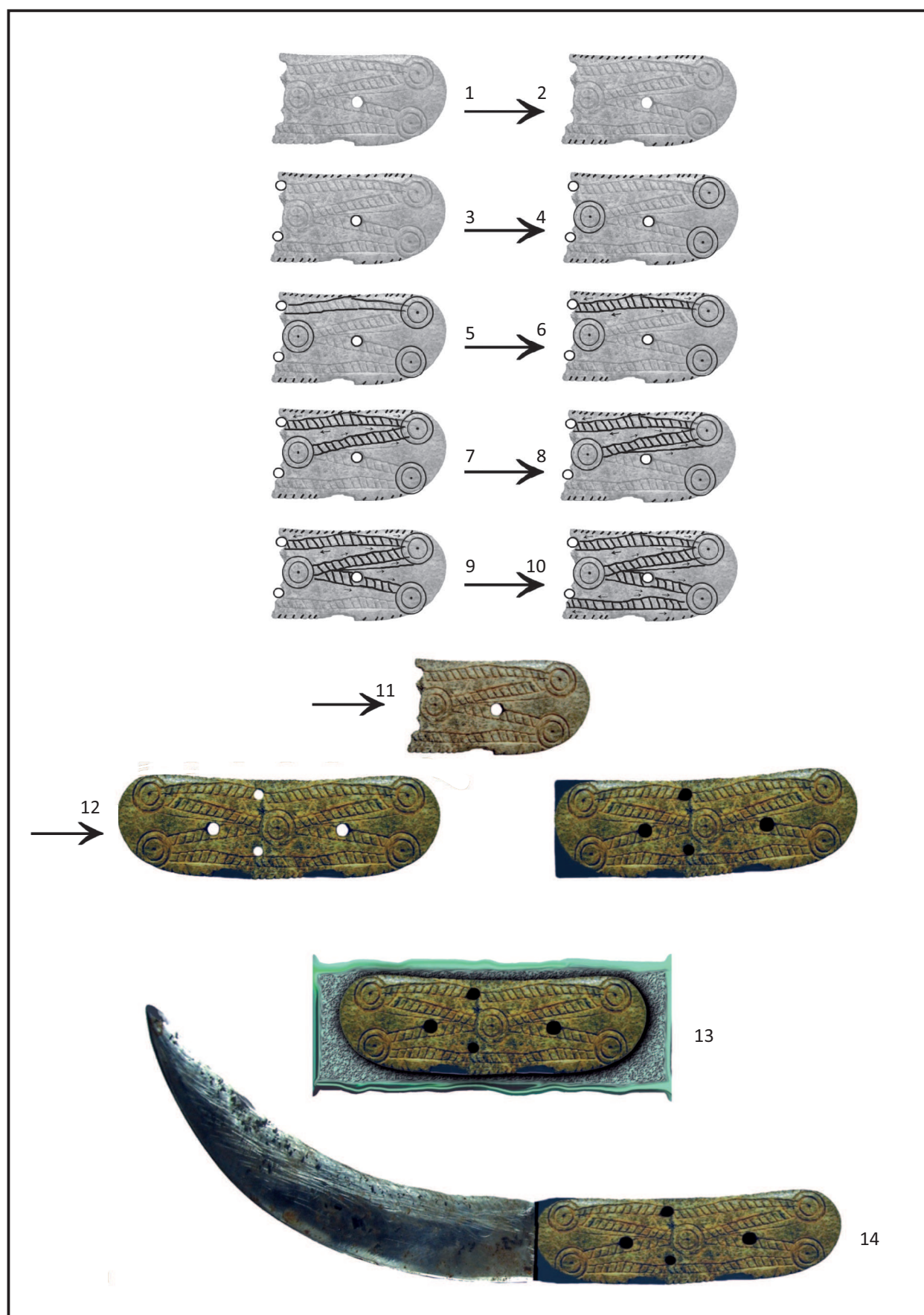
**Pl. VI.** 1–6. Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



**Pl. VII.** 1–6. Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



**Pl. VIII.** 1–6. Ardeu-“Cetățuie”. Red deer antler plate: details of engraved decoration – various scales. Photo Corneliu Beldiman.



**Pl. IX. 1–14.** Ardeu-“Cetățuie”. Red deer antler plate: decoration – hypothetical restoration of stages of engraving and ways of use. Experimental Dacian iron curved knife (*sica*) made by Marius Barbu. Photo Corneliu Beldiman.



**Pl. X.** Ardeu-“Cetățuie”. Red deer antler plate: hypothetical restoration.



# A DALMATIAN TYPE BROOCH DISCOVERED AT ROȘIA MONTANĂ\*

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**Keywords:** *dalmatian type brooch, Roșia Montană, Țarina necropolis, Roman period.*

**Abstract:** *Preventive archaeological research within the National Research Programme “Alburnus Maior” contributed to the enrichment of the database information that can operate, in this moment, for the high mountain area in the North-Western side of Alba County, the centres of ancient mining Abrud, Corna, Bucium, Roșia Montană.*

*The largest roman necropolis from Roșia Montană, until*

*now, is that located in Țarina perimeter. Of all the investigated graves from this point, M28 distinguishes itself by a rich inventory, but also through several special pieces. Of all these, we believe that a brooch, discovered among the good-grave, deserves to be taken into the conversation.*

*The piece, unique in Roman Dacia until this stage of research, has the closest analogies in the Dalmatian area, in the third variant of arched hinged brooches with two pins.*

*This kind of brooches can be dated in the 1<sup>st</sup>–2<sup>nd</sup> centuries AD.*

## I. INTRODUCTION

The entire costume is a reflection of the need but also is an expression of the social and ethnic identity<sup>1</sup>. The cut and the pieces of the garment, the material, the accessories and the adornments provide significant information about the owner: the gender, the age, the social status, the ethnicity. Of all these, the brooches have an important place in the costume because they are not simple elements for fixing the clothes, but also they offer data about the fashion in a specific period, to a certain ethnic group<sup>2</sup>.

The brooch which is the subject of this note was discovered in a cremation grave investigated in 2004, in Roșia Montană.

Roșia Montană (the antique *Alburnus Maior*), the centre of the auriferous mining plants from Roman Dacia, has become known due to the fortuitous archaeological discoveries, especially the wax coated tablets<sup>3</sup> but also to a series of epigraphic monuments<sup>4</sup>. Although the archaeological findings pointed out the special character, already known, of this area, field surveys have been undertaken only sporadically, in the 80s<sup>5</sup>.

\* We would like to thank Ioana Barbu and Cătălin Cristescu for the review of the translation.

<sup>1</sup> REGNAULT 1900, p. 329 and following.

<sup>2</sup> FEGUÈRE 1985, p. 448; COCIȘ 2004, p. 13.

<sup>3</sup> IDR I, p. 165–256.

<sup>4</sup> IDR III/3, p. 374–422.

<sup>5</sup> WOLLMANN 1985–1986, p. 254–257.

The purpose of the National Research Programme “Alburnus Maior” was the archaeological investigation of the land affected by the future mining plants<sup>6</sup>. The results were amazing, especially regarding the funerary aspects. Five cremation cemeteries have been researched – Hop-Găuri, Jig-Piciorag, Pârâul Porcului-Tăul Secuilor, Tăul Cornii and Țarina – and two funerary areas – Carpeni and Szekely<sup>7</sup>.

The Țarina Necropolis has been investigated during three archaeological campaigns (2003–2005)<sup>8</sup>, with the participation of specialists from several institutions<sup>9</sup>. In 2004, the Museum of Dacian and Roman Civilisation’s sector has been placed on the property of Gligor Viorel. In the Southern part of this area, the complex M28, a cremation grave with burning at *ustrinum*, has been researched. This grave contained a very rich and interesting funerary inventory<sup>10</sup>. Of all the pieces, the brooch provides interesting information on the identity of the owner, but, more importantly, it is the only item of this kind discovered in Roman Dacia.

## II. THE BROOCH’S DESCRIPTION

The brooch (Fig. 1) is fragmentary. The remaining parts are the bow and a part of the fasten system, with the axis around which the needle pivots. The maximum length is 4 cm and the width is 1.2 cm. The brooch is made of bronze, iron and silver. Fifteen iron rods, of 1.2 cm in length, are fixed in the curved, almost half-rounded bronze bow. These perforate the bow from one side to the other. Two bronze sheets are scrolled on each rod (one sheet on each side of the arch), like some long, tubular beads. The upper part of the bow is silvered and decorated by two parallel rows of linear incisions, separated by a groove.

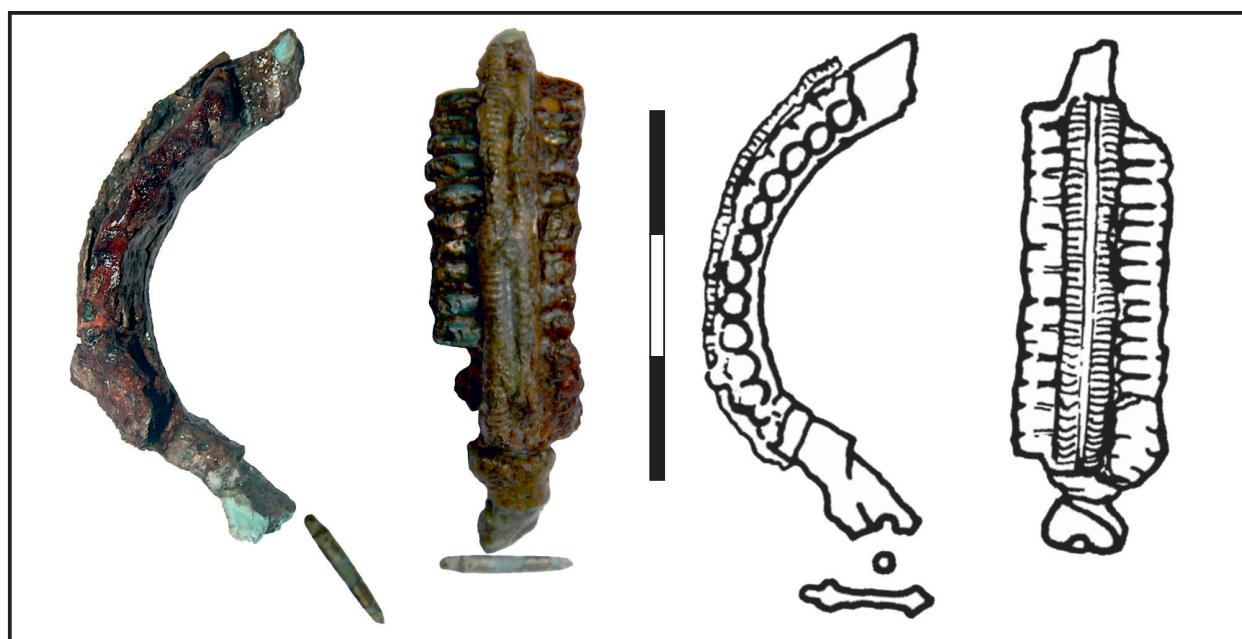


Fig. 1. The brooch from Roșia Montană.

There is nothing left of the catchplate and the head, poorly kept, seems to be small and trapezoidal. We can still see, on the pivot, in the middle part, traces of use, because of the movement of the pin. The ends’ diameters are smaller than the centre, probably because here there were set two beads.

<sup>6</sup> DAMIAN 2003.

<sup>7</sup> DAMIAN, SIMION 2007, p. 141, with all bibliographic references on the problem.

<sup>8</sup> DAMIAN ET AL 2004; DAMIAN ET AL 2005; DAMIAN ET AL 2006.

<sup>9</sup> National Museum of Transylvanian History Cluj-Napoca, National Museum of the Union Alba Iulia, Museum of Dacian and Roman Civilisation Deva, National Institute of Historical Monuments, Institute of Archaeology Vasile Pârvan București, Institute of Archaeology and Art History Cluj-Napoca.

<sup>10</sup> The grave will be the subject of a separate study.

The brooch has been burnt; probably, it pinned up the deceased garment when he was cremated at *ustrinum*.

### III. DISCUSSIONS AND CONCLUSIONS

The brooch, unique in Roman Dacia until this point, has the closest analogies in the Dalmatian area, in arched hinged fibulae with two pins. This type of brooches was analyzed by Ivo Lokošek, who studied the pieces coming from Dalmatia, from the fibula collection of the Archaeological Museum in Split. They were divided into three variants<sup>11</sup>. The piece that we analyze here is very similar to those from the third variant<sup>12</sup>. Three rows of beads, that are encrusting the body, separated by two vertical undecorated or patterned with linear incisions or in the shape of “wolf teeth” bands are the main characteristics, beside the two pins that revolve around the axis. Likewise, the head is rectangular or trapezoidal, undecorated or its ornamentation consisting of concentric circles, parallel incisions or in the shape of “wolf teeth” or is a mixture of these decors. The hinge is formed by the head’s exterior or interior wounding<sup>13</sup>. The brooch that is the subject of our study derived from this third variant. The structure is simpler. It has just one pin and the middle beads row no longer exists. It still keeps two linear incisions rows on the upper part of the bow, separated through a groove.

Remza Košćević, in the monograph dedicated to the brooches from *Siscia*, puts on in the sixth type, the Aucissa brooches<sup>14</sup>, an arched hinged fibula with two pins, with the bow divided into two flat bands, patterned with nine beads in three parallel rows<sup>15</sup>. Beside this one, there are five more arched hinged fibulae with one pin<sup>16</sup>. The author says that they remove visible from the base type, being, probably, local imitations<sup>17</sup>. They are analogues to the brooches analyzed by Ivan Marović, who considers them local Dalmatian variants, made in this area in the 1<sup>st</sup> century, in the same time with other forms of Aucissa brooches<sup>18</sup>. The piece number 14 comes into notice. Its bow is perforated, at the maximum arching, by a rod with one bead at each one of the ends. We cannot figure if there were other rods which are missing now or this was the only one. Likewise, in the upper part of the arch there is an ornamentation consisting of a row of linear incisions<sup>19</sup>. Analyzing all these aspects, we can say that this piece from *Siscia* is, also, a good analogy for our brooch.

Regarding the origin and evolution of this group of fibulae, the researchers’ opinions are divided into two variants: the first one says that they are local variety of the Aucissa type and the second one that there is a distinguished kind of brooches, which has a separate development. Ivan Marović puts them on an Adriatic-Dalmatian variant of the Aucissa brooches, starting from the geographical criteria – this kind of pieces was found, mostly, in Dalmatia, while there are just few in vicinity<sup>20</sup>. Remza Košćević resumes Marović’s theory about these Dalmatian fibulae, considering them as a variation of the Aucissa type<sup>21</sup>. Likewise, Aleksandrina Cermanović-Kuzmanović thinks that the pieces from Komini are a subtype of the Aucissa brooches<sup>22</sup>.

Ivo Lokošek treats these brooches as an individual type, affirming that the first variant previous to the Aucissa type and the second and third variants are contemporaneous to that one<sup>23</sup>. Consequently, he names them arched hinged fibulae with two pins, saying, almost certainly, that they have a local

<sup>11</sup> LOKOŠEK 1988, p. 5–20.

<sup>12</sup> LOKOŠEK 1988, p. 10–16.

<sup>13</sup> LOKOŠEK 1988, p. 10–13, pl. 3/1–6, pl. 4/1–5.

<sup>14</sup> KOŠĆEVIĆ 1980, p. 13–14.

<sup>15</sup> KOŠĆEVIĆ 1980, p. 46, kat. 76, pl. II/13, Foto XXXV/12.

<sup>16</sup> KOŠĆEVIĆ 1980, p. 46, kat. 68–72, pl. II/12, 14, 15, IV/28, 29, Foto XXXV/13, XXXVI/3.

<sup>17</sup> KOŠĆEVIĆ 1980, p. 17.

<sup>18</sup> MAROVIĆ 1959, p. 78.

<sup>19</sup> KOŠĆEVIĆ 1980, p. 45, kat. 14, pl. II/14.

<sup>20</sup> MAROVIĆ 1959, p. 77.

<sup>21</sup> KOŠĆEVIĆ 1980, p. 17.

<sup>22</sup> CERMANOVIĆ-KUZMANOVIĆ 1997, p. 388.

<sup>23</sup> LOKOŠEK 1988, p. 16.

tradition, borrowing elements from La Tène spear-shaped brooches, having in common even almost the same distribution area<sup>24</sup>.

Recently, Sanja Ivčević, doing the repertory of the brooches from *Salona*, resumes the problem of the arched hinged fibulae with two pins, drawing attention to the similarity with the Aucissa type but considering that local borders and lower limit on the timeline allow framing them in a separate type<sup>25</sup>.

This kind of brooches is distributed, especially, in central Dalmatia, on the coastline and hinterland<sup>26</sup>, but only few copies were discovered in the neighbouring provinces: in Upper Moesia (for example, a piece from *Viminacium*<sup>27</sup> with very good analogy in the second variant to Lokošek) or Pannonia (there is a brooch from *Siscia*<sup>28</sup> that corresponds to the third variant to Lokošek).

Our brooch increases the number of discoveries of this type from Dacia. Until now, there has been recovered one piece, from Abrud, not far from Roșia Montană<sup>29</sup>. It is an arched hinged fibula with two pins, first variant to Lokošek. Sorin Cociș puts it on a special type, XVI, Dalmatian brooches<sup>30</sup>. Likewise, he connects the piece to the Dalmatian human presence in the mining activity from Abrud's area<sup>31</sup>.

Concerning the chronology, Ivan Marović says that they can be dated in the 1<sup>st</sup> century<sup>32</sup> and Ivo Lokošek considers, based on analogies discovered in certain contexts, that the third variant of the arched hinged fibulae with two pins is dated in the 2<sup>nd</sup> century, in the same time with the Aucissa type<sup>33</sup>.

In conclusion, we emphasise, again, the particular nature of the brooch discovered in Țarina necropolis. It is the only piece of this kind from Roman Dacia and it offers us ethnic identity regarding the owner. The piece must have belonged to a person arrived from Dalmatia, who brought, among other things, this brooch that became one of his good-grave. Two funerary monuments, *stelae*, support this affirmation<sup>34</sup>. One of them was discovered close to the Grave M 28<sup>35</sup>. *Starva*, the name of the Dalmatian settlement where the colonists are coming from, is mentioned in the epigraphic texts<sup>36</sup>. The settlement is located, probably, in the territory of the *municipium Salvium*. This is the area where the most of the arched hinged fibulae with two pins were discovered.

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<sup>24</sup> LOKOŠEK 1988, p.13–14.

<sup>25</sup> IVČEVIĆ 2002, p. 237.

<sup>26</sup> LOKOŠEK 1988, p. 15, fig. 6; CERMANOVIĆ-KUZMANOVIĆ 1997, p. 388; IVČEVIĆ 2002, p. 236.

<sup>27</sup> REDŽIĆ 2007, p. 11, kat. 4, T.1 /4.

<sup>28</sup> KOŠČEVIĆ 1980, p. 46, kat. 76, pl. II/13, photo XXXIV/12.

<sup>29</sup> MOGA, MESAROȘ 1980, p. 142–145, fig. 5, 6; COCIȘ 2004, p. 85, pl. LIV/792, kat. no. 792.

<sup>30</sup> COCIȘ 2004, p. 85.

<sup>31</sup> COCIȘ 2004, p. 85.

<sup>32</sup> MAROVIĆ 1959, p. 77.

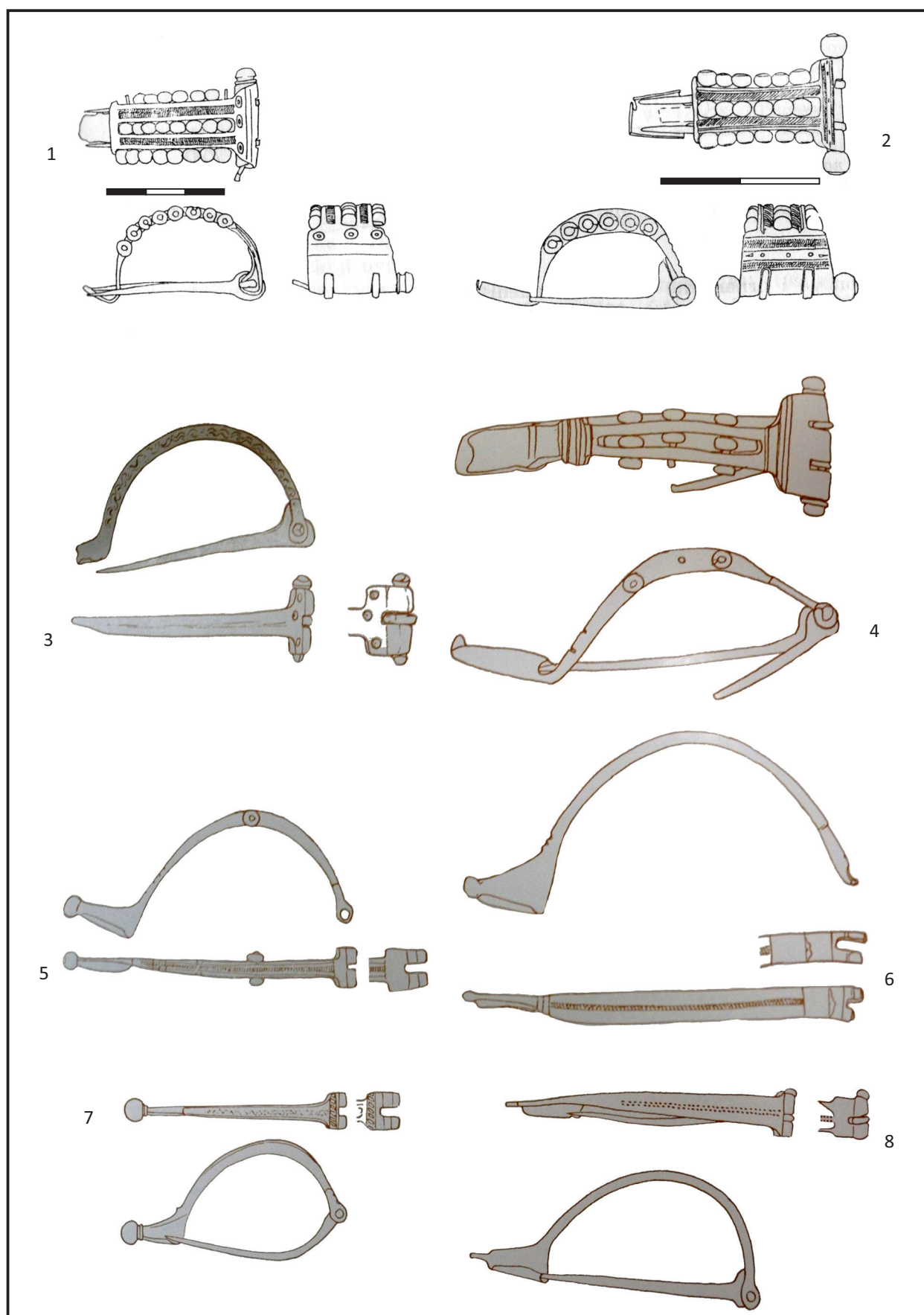
<sup>33</sup> LOKOŠEK 1988, p. 13.

<sup>34</sup> TIMOFAN, BARBU 2007; CIONGRADI, TIMOFAN, BÂRCĂ 2008, p. 257, kat. 1, 2, Abb. 1–7.

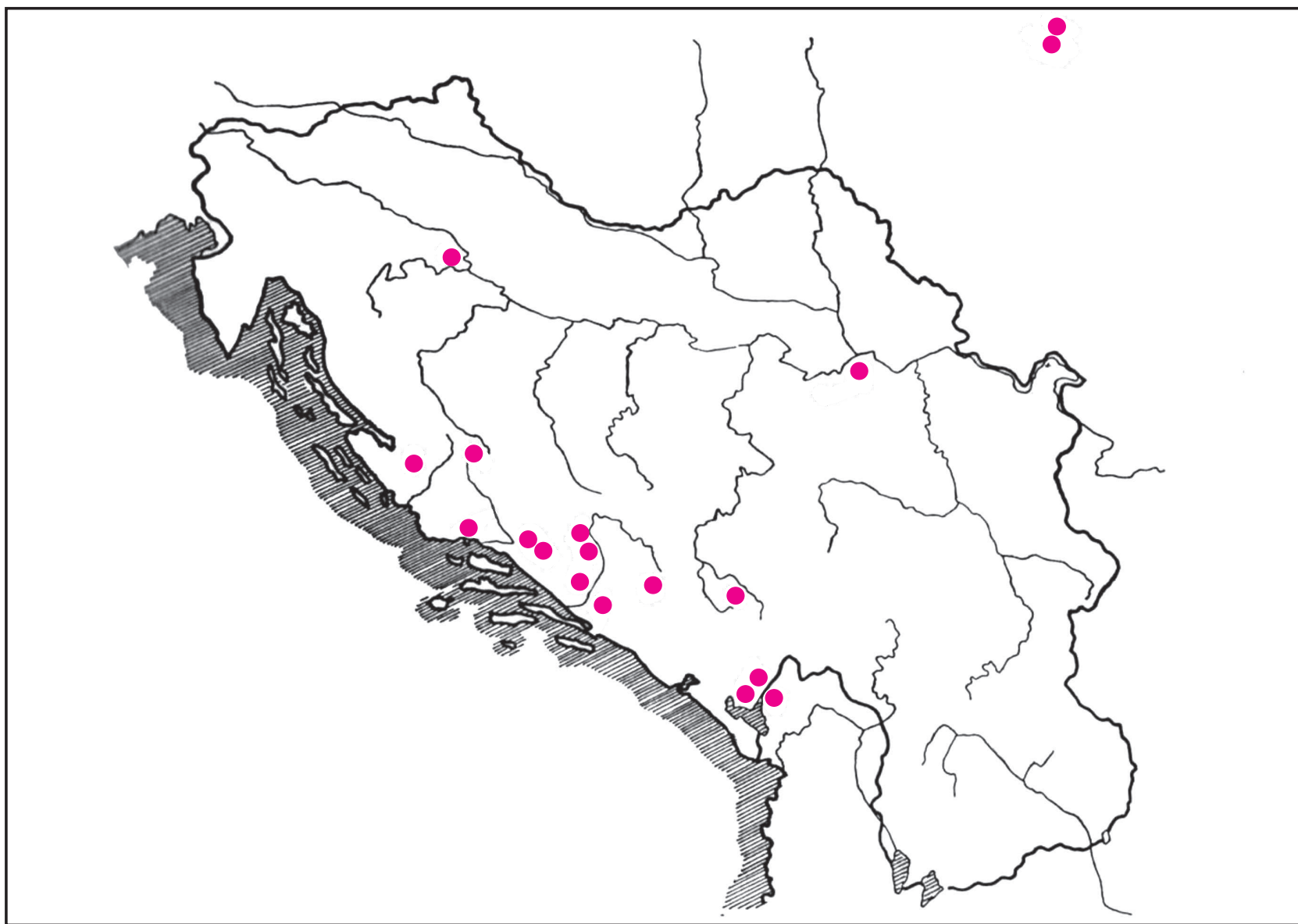
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**Pl. I.** Arched hinged brooches with one and two pins (1–2 – after LOKOŠEK 1988, sl. 3/1, 6; 3–8 – after KOŠČEVIĆ 1980, T. II/12–15, T. IV/28–29).



**Pl. II.** The distribution map (after LOKOŠEK 1988, sl. 5, with our additions for Dacia).

# ROMAN BEADS FOUND IN TIBISCUM\*

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**Keywords:** beads, glass, Tibiscum, officinae, chronology, Roman period.

**Abstract:** The existence of bead workshops in Tibiscum is demonstrated by the discovery of glass melting kilns, glass crucibles, iron rods, scrapped beads and waste feedstock.

The aim of our study is to analyze the beads still unpublished from the collection of the County Museum of Ethnography and Border Regiment of Caransebeș, found on the territory of the ancient town (both Tibiscum – Jupa and Iaz). There are 522 beads made of glass that are divided

in seven types and few subtypes. Typologically, they are identical to those discovered in the workshops of the vicus. There is only one different type, III.1.B. Likewise the beads have the same dimensions as the ones of the vicus. Some colour differences have been observed. These differences are natural, because of the three officinae attested at Tibiscum, which were more than enough for the town's fashionable needs.

It is well known that this kind of adornments was not as important for the costume, in the Roman provinces, as it was to the Barbaricum.

The existence of bead workshops in Tibiscum is demonstrated by the discovery of glass melting kilns, glass crucibles, iron rods, scrapped beads and waste feedstock<sup>1</sup>. The functioning of these *officinae* may be put in relation with communities of handicraftsmen, who, probably, came from the Syrian-Palestinian space, as a consequence of the stationing here of military units from the peculiar area: *cohors I Sagittariorum, numerus palmyrenorum Tibiscensium*<sup>2</sup>.

Two workshops have been found in the *vicus* and a third one West from building III. The first identified workshop (West from building I) had functioned for an extensive period, from the time of the *vicus* (by then, consisting of wooden barracks) to the middle of the 3<sup>rd</sup> century AD. On the last post-Roman occupation level (dated to middle 4<sup>th</sup> century AD), there only occur scrapped beads instead of glass-melting installations<sup>3</sup>. The second workshop (building VII) dates to the Hadrian – Antonius Pius period and appears to be also focused on carnelian and coral bead-making<sup>4</sup>.

Within these workshops was discovered a number of 10,581 beads (and an additional thousands of fragments), that means 11 types of monochromatic beads, 7 types of polychromatic beads (and quite a few further variants), beads made in sandwich technique, gilded beads, beads of coral or carnelian. In terms of the vitreous paste from Tibiscum, opaque glass, coloured in different shades, is dominant, alongside with a blue/light-blue translucent (or of a semi-translucent) shade<sup>5</sup>.

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<sup>1</sup> BENE 2004, p. 166–180, 185.

<sup>2</sup> BENE 2004, p. 267.

<sup>3</sup> BENE 2004, p. 161–162.

<sup>4</sup> BENE 2004, p. 161–162, 165.

<sup>5</sup> BENE 2004, p. 264; BENE 2008, p. 143.

These specimens, found within the three workshops, had been published by D. Benea<sup>6</sup>. The aim of our study is to analyze beads found on the territory of Tibiscum (both Tibiscum – Jupa and Iaz), unpublished artifacts, from the collection of the County Museum of Ethnography and Border Regiment, Caransebeș<sup>7</sup>. Here, there are 522 such beads (see the table), all of them manufactured out of opaque glass paste (very rarely translucent), belonging to 7 shape-typologies and a few subtypes (Pl. I).

Beads of the first type are known in the literature as beads of round, circular or globular shape, being extremely numerous within the analyzed material (over 290 specimens). We have included in type I.1.A, the very small beads, attested by a single specimen of 3.7 mm. Larger beads (type I.1.B) have diameters ranging between 4.5 – 14.8 mm and varied chromatics (white, orange, red, blue, green). The beads of type I (Benea type V) had witnessed a great spread at Tibiscum. They have been attested both in the first workshop, surface A (dated to the first half of the 2<sup>nd</sup> century AD) and in edifice I, room 3 (on all occupation levels of the *officina*). Such beads have, also, been attested in the second workshop of the 7<sup>th</sup> building, dated to the period of Septimius Severus<sup>8</sup>. In the Sarmatian and Central European Barbaricum, these globular beads are extremely numerous, too, circulating since the 2<sup>nd</sup> century AD, up to the Late Empire/Hunnish period<sup>9</sup>.

Into type II, we have included truncated biconic shape beads. They are coloured in white, orange, blue, red or green. These beads belong to the most encountered type within the analyzed material (359 specimens; Pl. II/1). Only in two cases (no. 73 and 74) the beads were manufactured out of translucent glass of light-green colour (Pl. III/1), in the rest of the cases the paste being opaque. In the second workshop of Tibiscum (building VII), this type of beads has also been numerous, being dated to the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD<sup>10</sup>.

Cylindrical beads, larger in diameter than in length, of white, green or blue colour, are included in type III. Type III.1.A contains beads produced earlier in the Tibiscum *officinae* (Benea type II), produced in the first workshop after the Marcomannic Wars (at the end of 2<sup>nd</sup> century – beginning of the 3<sup>rd</sup> century AD)<sup>11</sup>. They are dated in necropolises of the 2<sup>nd</sup> century AD and attested until the Hunnish period in the Sarmatian space<sup>12</sup>. A similar dating (C2–D) is kept in the Central European *Barbaricum*, with the exception of the 2<sup>nd</sup> century AD<sup>13</sup>. A. H. Vaday considers the irregular specimens (version III.1.B) as being terminal pieces, attached to the end of a bead assembly<sup>14</sup>; they are not attested in the Tibiscum *officinae*.

We have included rectangular beads, with four (IV.1) or six faces (IV.2.A, IV.2.B), in type IV. There is only one sample belonging to type IV.1 (Pl. III/3), made of polychromatic glass (various shades of blue, yellow and burgundy) and with a chess pattern decoration/ Schachrbrettmuster (~ Maczyńska's type 268 a = Benea's type XV/3). This decoration technique has known its greatest spread in the Roman Empire, during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD<sup>15</sup>. Beads of this type circulated in the Central European barbarian world between B2 and C2<sup>16</sup>. Beads of hexagonal profile (IV.2.A) are of green (the great majority of them), white, red or blue colour. This type is present in Tibiscum (Benea's type III) on all occupation levels of building I<sup>17</sup> and is characteristic, in the Central Europe, to

<sup>6</sup> BENEA 2004.

<sup>7</sup> Unfortunately, many of the beads don't have the place of discovery mentioned and many are coming from donations.

<sup>8</sup> BENEA 2004, p. 234.

<sup>9</sup> VADAY 1989, p. 103; TEMPELMANN-MACZYŃSKA 1985, p. 27.

<sup>10</sup> BENEA 2004, p. 199, 236. In Prezeworsk and Wielbark Culture this type of beads is very rare (only 6 pieces until 1985) and they are dated in the period of early Roman Empire, TEMPELMANN-MACZYŃSKA 1985, p. 32 (group V).

<sup>11</sup> BENEA 2004, p. 227.

<sup>12</sup> VADAY 1989, p. 103.

<sup>13</sup> TEMPELMANN-MACZYŃSKA 1985, p. 39.

<sup>14</sup> VADAY 1989, p. 99.

<sup>15</sup> BENEA 2004, p. 206; VADAY 1989, p. 104.

<sup>16</sup> TEMPELMANN MACZYŃSKA 1985, p. 53, 60.

<sup>17</sup> BENEA 2004, p. 238.

Wielbark, Prezeworks and West Baltic cultures, and dated beginning with B2/C1 (reaching its peak in C1 – C2); their production and wear ends by period D (beginning/middle of 4<sup>th</sup> century – 5<sup>th</sup> century AD)<sup>18</sup>. Flat hexagonal beads (IV.2.B) are rare – only 4 samples within our material – and of white, burgundy (in this case, a mere imitation of carnelian types) or red colour. They are attested over the whole functioning period of *officina* I from Tibiscum (Benea's type IX)<sup>19</sup> and appear in the Sarmatian necropolises of the Szolnok County (Vaday's type IV.2B), over the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD<sup>20</sup>.

Beads with several corners, known in literature as “prismatic beads with smoothed corners” have been included in type V. Types of straight, regular shape (V.1), while not very many within the analyzed material, are diverse coloured (white, blue, red). They occur in a considerable amount in the first workshop from Tibiscum, probably due to their demand on barbarian market. They are, also, present, in large number, in Central Europe. In both areas, dating is identical and sensibly loose: 2<sup>nd</sup> to 4<sup>th</sup>/5<sup>th</sup> centuries AD<sup>21</sup>. Production of prismatic beads (Benea's type IV) in the first workshop from Tibiscum is documented on the occupation levels subsequent to the Marcomannic Wars and is produced until the closing of the workshop (4<sup>th</sup> century AD)<sup>22</sup>. Another subgroup consists of type V.2. These beads are smaller than the previous version (D = 3.4 – 5.3 mm, H = 4.5 – 6.9 mm), were made of opaque and translucent (predominantly orange) glass and are slightly concave near the middle.

There had been included the so-called *Sandwich type/Segmentierte Perlen* beads, in type VI. This type covers two variants: white (two samples) or green (one sample) glass beads or, composed out of combination of globular samples (attached in groups of two) or samples of smaller dimensions, gilded, grouped by two or by three (Pl. III/4–6). These categories of samples (with gold leaf) go into production, in Tibiscum, on all levels corresponding to restorations subsequent to the Marcomannic Wars<sup>23</sup>. These beads lack a dating of their own in the Sarmatian area, being chronologically situated, by M. Tempelmann – Maczyńska during stages B1 – B2/C2<sup>24</sup>.

The last of the bead types (type VII) covers specimens of circular shape, but rather flattened. Beads of this type are rare and of green, red or orange colour. Such beads have been found in the first workshop from Tibiscum, on the occupation level dated to the period of Marcus Aurelius<sup>25</sup>. A. H. Vaday includes round and flat beads to the earlier stages of the Sarmatian chronology, when she refers to the funerary findings of the Szolnok County<sup>26</sup>.

Therefore, it is to be observed the identity, typologically, between beads found during archaeological excavations, within various areas of Tibiscum, and beads documented from the bead workshops of the *vicus*. It is only one type that is not mentioned among findings from the *officinae*: III.1.B. Sizes of the analyzed samples coincide with those of documented beads of the workshops. Some differences may be encountered, rather rarely though, with respect to chromatics (i.e. see Pl. III/1).

Such remarks are legitimate, since in Tibiscum three *officinae* have functioned, more than enough for the city's bead supply. It is known that such adornments did not play such an important role to the dress of the Roman provinces as they did in *Barbaricum*<sup>27</sup>. Hence, bead export from Tibiscum would have targeted the Sarmatian world between the Danube and Tisa rivers. Possibly, this direction might have extended towards the Elbe and even further to the North<sup>28</sup>.

Translated by IAIN ADRIAN APREOTESI

<sup>18</sup> TEMPELMANN MACZYŃSKA 1985, p. 35.

<sup>19</sup> BENEÀ 2004, p. 238.

<sup>20</sup> VADAY 1989, p. 103.

<sup>21</sup> TEMPELMANN MACZYŃSKA 1985, p. 38 (group XIV); VADAY 1989, p. 103.

<sup>22</sup> BENEÀ 2004, p. 233.

<sup>23</sup> BENEÀ, 2004, p. 245.

<sup>24</sup> TEMPELMANN, MACZYŃSKA 1985, p. 64–65 (group XXIX 387 b).

<sup>25</sup> BENEÀ 2004, p. 227.

<sup>26</sup> VADAY 1989, p. 103.

<sup>27</sup> For example, in the Sarmatian graves from Great Hungarian Plain we can find hundreds or even thousands of such beads in some graves, see BATISTIĆ POPADIĆ 1984–1985, *passim*; VADAY ET AL 1989, *passim*; ISTVÁNOVITS, KULCSÁR 2001, *passim*; VÖRÖS 2003, p. 150.

<sup>28</sup> BENEÀ 2004, p. 266.

| No. | Inv. No. | Type   | H     | D    | Colour | Place of discovery | Observation |
|-----|----------|--------|-------|------|--------|--------------------|-------------|
| 1   | 11790    | I.1.B  | 6.6   | 8.7  | red    |                    | discoloured |
| 2   | 11790    | I.1.B  | 5.2   | 9.1  | blue   |                    | discoloured |
| 3   | 11790    | I.1.B  | 6.5   | 9    | white  |                    | discoloured |
| 4   | 11790    | I.1.B  | 5.4   | 8.4  | white  |                    | discoloured |
| 5   | 11790    | I.1.B  | 5.1   | 8.2  | red    |                    | discoloured |
| 6   | 11790    | I.1.B  | 6.2   | 8.4  | red    |                    | discoloured |
| 7   | 11790    | I.1.B  | 5.6   | 8.2  | white  |                    | discoloured |
| 8   | 11790    | I.1.B  | 6.6   | 8.4  | orange |                    | discoloured |
| 9   | 11790    | I.1.B  | 5.9   | 7.7  | red    |                    | discoloured |
| 10  | 11790    | I.1.B  | 6.4   | 8.9  | orange |                    | discoloured |
| 11  | 11790    | IV.2.A | 10.5  | 4.9  | green  |                    | discoloured |
| 12  | 11790    | IV.2.A | 10.6  | 5.3  | red    |                    | discoloured |
| 13  | 11790    | IV.2.A | 10    | 4.9  | blue   |                    | discoloured |
| 14  | 11790    | IV.2.A | 9.7   | 4.9  | white  |                    | discoloured |
| 15  | 11790    | IV.2.A | 10.5  | 7.08 | green  |                    | discoloured |
| 16  | 11790    | IV.2.A | 10.1  | 5.6  | green  |                    | discoloured |
| 17  | 11790    | IV.2.A | 11.9  | 7.2  | red    |                    | discoloured |
| 18  | 11790    | IV.2.A | 8.5   | 4.6  | red    |                    | discoloured |
| 19  | 11790    | IV.2.A | 12.7  | 5.7  | red    |                    | discoloured |
| 20  | 11790    | IV.2.A | 11.1  | 6.8  | green  |                    | discoloured |
| 21  | 11790    | IV.2.A | 10.6  | 5.4  | white  |                    | discoloured |
| 22  | 11790    | IV.2.A | 10.1  | 5.9  | green  |                    | discoloured |
| 23  | 11790    | IV.2.A | 12.3  | 5.8  | red    |                    | discoloured |
| 24  | 11790    | II     | 11.7  | 9.08 | white  |                    | discoloured |
| 25  | 11790    | IV.2.A | 11.5  | 4.9  | red    |                    | discoloured |
| 26  | 11790    | IV.2.A | 9.1   | 6.7  | blue   |                    | discoloured |
| 27  | 11790    | IV.2.A | 10.7  | 6.01 | white  |                    | discoloured |
| 28  | 11790    | IV.2.A | 12.5  | 6.3  | red    |                    | discoloured |
| 29  | 11790    | IV.2.A | 9.1   | 5.8  | red    |                    | discoloured |
| 30  | 11790    | IV.2.A | 12.1  | 7.06 | red    |                    | discoloured |
| 31  | 11790    | IV.2.A | 10.4  | 5.7  | green  |                    | discoloured |
| 32  | 11790    | IV.2.A | 11.09 | 7.06 | green  |                    | discoloured |
| 33  | 11790    | IV.2.A | 9.9   | 4.9  | white  |                    | discoloured |
| 34  | 11790    | IV.2.A | 10.8  | 5.4  | green  |                    | discoloured |
| 35  | 11790    | IV.2.A | 11.3  | 5.3  | red    |                    | discoloured |
| 36  | 11790    | IV.2.A | 11.2  | 4.7  | green  |                    | discoloured |
| 37  | 11790    | I.1.B  | 6.5   | 8.8  | orange |                    | discoloured |
| 38  | 11790    | I.1.B  | 6.8   | 8.3  | white  |                    | discoloured |
| 39  | 11790    | I.1.B  | 6.6   | 7.8  | orange |                    | discoloured |
| 40  | 11790    | I.1.B  | 6.6   | 8.5  | white  |                    |             |
| 41  | 11790    | I.1.B  | 6.6   | 8.4  | red    |                    |             |
| 42  | 11790    | I.1.B  | 5.3   | 7.5  | red    |                    |             |
| 43  | 11790    | I.1.B  | 5.2   | 8.5  | white  |                    |             |
| 44  | 11790    | I.1.B  | 7.1   | 7.9  | white  |                    |             |
| 45  | 11790    | I.1.B  | 7.9   | 7.9  | white  |                    |             |
| 46  | 11790    | I.1.B  | 6.2   | 8.5  | red    |                    |             |
| 47  | 11790    | II     | 11.5  | 7.2  | red    |                    |             |
| 48  | 11790    | I.1.B  | 6.2   | 8.5  | orange |                    |             |
| 49  | 11790    | I.1.B  | 6.8   | 8.1  | red    |                    |             |
| 50  | 11790    | I.1.B  | 6.4   | 10.6 | red    |                    |             |
| 51  | 11790    | V.1    | 9     | 5.2  | red    |                    |             |

| No. | Inv. No. | Type    | H    | D    | Colour     | Place of discovery        | Observation |
|-----|----------|---------|------|------|------------|---------------------------|-------------|
| 52  | 11790    | I.1.B   | 6.3  | 7.9  | blue       |                           |             |
| 53  | 11790    | I.1.B   | 6.4  | 6.9  | white      |                           |             |
| 54  | 11790    | I.1.B   | 4.8  | 6.3  | red        |                           |             |
| 55  | 11790    | I.1.B   | 4.1  | 7.3  | blue       |                           |             |
| 60  | 11790    | V.1     | 8.3  | 5.4  | white      |                           |             |
| 61  | 11790    | I.1.B   | 6.4  | 8.3  | blue       |                           |             |
| 62  | 11790    | I.1.B   | 5.9  | 7.6  | blue       |                           |             |
| 63  | 11790    | I.1.B   | 4.5  | 6.6  | white      |                           |             |
| 64  | 11790    | I.1.B   | 6    | 8.4  | red        |                           |             |
| 65  | 11790    | I.1.B   | 4.7  | 6.8  | green      |                           |             |
| 66  | 11790    | I.1.B   | 6.2  | 8.3  | red        |                           |             |
| 67  | 11790    | I.1.B   | 6.5  | 8.06 | blue       |                           |             |
| 68  | 11790    | I.1.B   | 5.1  | 8.04 | red        |                           |             |
| 69  | 11790    | I.1.B   | 6.3  | 8.2  | orange     |                           |             |
| 70  | 11790    | I.1.B   | 4.6  | 7.5  | white      |                           |             |
| 71  | 3288     | I.1.B   | 7.4  | 8.7  | green      | building C 3, H=1,50      |             |
| 72  | 3485     | IV.2.B  | 16.8 | 12.5 | white      | D1, c=6–7, H=0.50–0.60 cm | discoloured |
| 73  | 8998     | II      | 16.4 | 9.02 | green      | field survey              | discoloured |
| 74  | 8997     | II      | 15.5 | 8.7  | green      | field survey              | discoloured |
| 75  | 3264     | II      | 14.3 | 7.6  | blue       | field survey              | discoloured |
| 76  | 3265     | II      | 14.2 | 7.1  | blue       | field survey              | discoloured |
| 77  | 3266     | II      | 11.2 | 5.9  | blue       | field survey              | discoloured |
| 78  | 3255     | I.1.A   | 3.9  | 3.7  | orange     |                           | discoloured |
| 79  | 3254     | I.1.B   | 4.3  | 6.5  | orange     |                           | discoloured |
| 80  | 3256     | III.1.A | 6.5  | 3.9  | white      |                           |             |
| 81  | 3257     | II      | 8.8  | 5.07 | orange     |                           | discoloured |
| 82  | 3258     | I.1.B   | 6.2  | 6.9  | orange     |                           | discoloured |
| 83  | 3259     | III.1.A | 6    | 4.04 | orange     |                           | discoloured |
| 84  | 3260     | I.1.B   | 6.8  | 7.4  | orange     |                           |             |
| 85  | 3261     | I.1.B   | 5.5  | 5.7  | orange     |                           | discoloured |
| 86  | 3262     | I.1.B   | 6.7  | 7.1  | orange     |                           | discoloured |
| 87  | 3263     | I.1.B   | 6.3  | 8.6  | orange     |                           | discoloured |
| 88  | 3235     | I.1.B   | 7.8  | 9    | impossible | “Pod Nord”, building IA/B |             |
| 89  | 3236     | I.1.B   | 4.3  | 7.4  | impossible | “Pod Nord”, building IA/B |             |
| 90  | 3237     | I.1.B   | 5.4  | 6.7  | impossible | “Pod Nord”, building IA/B |             |
| 91  | 3238     | I.1.B   | 6.03 | 7.2  | impossible | “Pod Nord”, building IA/B |             |
| 92  | 3239     | I.1.B   | 6.6  | 7.9  | impossible | “Pod Nord”, building IA/B |             |
| 93  | 3240     | I.1.B   | 5.8  | 7.01 | impossible | “Pod Nord”, building IA/B | fragmentary |
| 94  | 3241     | I.1.B   | 6.3  | 7.3  | impossible | “Pod Nord”, building IA/B | fragmentary |
| 95  | 3242     | I.1.B   | 5.1  | 7.4  | impossible | “Pod Nord”, building IA/B | fragmentary |
| 96  | 3243     | I.1.B   | 6.2  | 8.8  | impossible | “Pod Nord”, building IA/B | fragmentary |
| 97  | 3244     | I.1.B   | 3.6  | 7.1  | impossible | “Pod Nord”, building IA/B | fragmentary |
| 98  | 3245     | I.1.B   | 6.6  | 7.9  | impossible | “Pod Nord”, building IA/B | discoloured |
| 99  | 3246     | I.1.B   | 6.3  | 8.5  | impossible | “Pod Nord”, building IA/B |             |
| 100 | 3247     | I.1.B   | 6.6  | 7.9  | impossible | “Pod Nord”, building IA/B |             |
| 101 | 3248     | I.1.B   | 7.3  | 8.4  | impossible | “Pod Nord”, building IA/B | discoloured |
| 102 | 3249     | I.1.B   | 6.3  | 7.2  | impossible | “Pod Nord”, building IA/B |             |
| 103 | 3250     | I.1.B   | 6.8  | 7.9  | impossible | “Pod Nord”, building IA/B | discoloured |
| 104 | 3251     | I.1.B   | 4.8  | 7.05 | impossible | “Pod Nord”, building IA/B | discoloured |
| 105 | 3252     | I.1.B   | 8.1  | 8.4  | impossible | “Pod Nord”, building IA/B |             |
| 106 | 3253     | I.1.B   | 6.6  | 8.8  | impossible | “Pod Nord”, building IA/B | discoloured |

| No. | Inv. No. | Type    | H    | D    | Colour     | Place of discovery        | Observation |
|-----|----------|---------|------|------|------------|---------------------------|-------------|
| 107 | 3207     | II      | 10.8 | 7.4  | red        | "Pod Nord", building IA/B |             |
| 108 | 3208     | II      | 12.5 | 6.8  | impossible | "Pod Nord", building IA/B |             |
| 109 | 3209     | II      | 12.6 | 6.8  | impossible | "Pod Nord", building IA/B |             |
| 110 | 3210     | I.1.B   | 4.5  | 7.2  | impossible | "Pod Nord", building IA/B | fragmentary |
| 111 | 3211     | I.1.B   | 4.1  | 8.5  | impossible | "Pod Nord", building IA/B | fragmentary |
| 112 | 3212     | I.1.B   | 4.6  | 7.01 | impossible | "Pod Nord", building IA/B |             |
| 113 | 3213     | I.1.B   | 4.7  | 7.08 | impossible | "Pod Nord", building IA/B |             |
| 114 | 3214     | I.1.B   | 4.4  | 6.5  | impossible | "Pod Nord", building IA/B |             |
| 115 | 3215     | I.1.B   | 4.9  | 7.2  | impossible | "Pod Nord", building IA/B |             |
| 116 | 3216     | I.1.B   | 4.1  | 7.1  | impossible | "Pod Nord", building IA/B |             |
| 117 | 3217     | I.1.B   | 5.4  | 5.2  | impossible | "Pod Nord", building IA/B |             |
| 118 | 3218     | I.1.B   | 4.5  | 7.4  | impossible | "Pod Nord", building IA/B |             |
| 119 | 3219     | I.1.B   | 4.7  | 6.8  | impossible | "Pod Nord", building IA/B |             |
| 120 | 3220     | I.1.B   | 5.1  | 7.4  | impossible | "Pod Nord", building IA/B |             |
| 121 | 3221     | I.1.B   | 3.4  | 8.4  | impossible | "Pod Nord", building IA/B |             |
| 122 | 3222     | I.1.B   | 6.3  | 7.7  | impossible | "Pod Nord", building IA/B |             |
| 123 | 3223     | I.1.B   | 4.02 | 6.5  | impossible | "Pod Nord", building IA/B |             |
| 124 | 3224     | I.1.B   | 4.3  | 7.1  | impossible | "Pod Nord", building IA/B | fragmentary |
| 125 | 3225     | I.1.B   | 4.2  | 6.3  | impossible | "Pod Nord", building IA/B | fragmentary |
| 126 | 3226     | I.1.B   | 5.6  | 5.03 | impossible | "Pod Nord", building IA/B | fragmentary |
| 127 | 3227     | I.1.B   | 3.5  | 6.3  | impossible | "Pod Nord", building IA/B | fragmentary |
| 128 | 3228     | I.1.B   | 6.1  | 5.9  | impossible | "Pod Nord", building IA/B | fragmentary |
| 129 | 3229     | I.1.B   | 3.7  | 6.3  | impossible | "Pod Nord", building IA/B | fragmentary |
| 130 | 3230     | I.1.B   | 3.5  | 6.6  | impossible | "Pod Nord", building IA/B | fragmentary |
| 131 | 3231     | I.1.B   | 6.1  | 7.1  | impossible | "Pod Nord", building IA/B |             |
| 132 | 3232     | II      | 14.2 | 7.4  | white      | "Pod Nord", building IA/B |             |
| 133 | 3233     | II      | 12.6 | 7.02 | red        | "Pod Nord", building IA/B |             |
| 134 | 3234     | II      | 12.7 | 6.7  | impossible | "Pod Nord", building IA/B |             |
| 135 | 1803     | IV.2.A  | 10.9 | 5.6  | green      |                           |             |
| 136 | 1804     | IV.2.A  | 9.6  | 5.3  | green      |                           |             |
| 137 | 1805     | II      | 13.6 | 6.8  | blue       |                           | fragmentary |
| 138 | 1806     | III.1.A | 5.6  | 4.8  | blue       |                           | fragmentary |
| 139 | 1807     | III.1.A | 5.6  | 5.4  | blue       |                           | fragmentary |
| 140 | 1808     | I.1.B   | 6.2  | 8.2  | green      |                           |             |
| 141 | 1809     | V.2     | 6.9  | 4.7  | green      |                           |             |
| 142 | 1810     | V.1     | 7.7  | 5.9  | blue       |                           |             |
| 143 | 1811     | II      | 12.2 | 4.9  | green      |                           |             |
| 144 | 1812     | II      | 13   | 6.1  | red        |                           |             |
| 145 | 1813     | IV.2.B  | 12.5 | 7.6  | white      |                           |             |
| 146 | 1814     | VII     | 7.8  | 9.1  | green      |                           |             |
| 147 | 1815     | I.1.B   | 6.1  | 7.5  | green      |                           |             |
| 148 | 1816     | I.1.B   | 5.8  | 6.9  | green      |                           |             |
| 149 | 1817     | I.1.B   | 7.2  | 8.03 | green      |                           |             |
| 150 | 1818     | I.1.B   | 6.2  | 7.3  | green      |                           |             |
| 151 | 1819     | II      | 14.5 | 7.01 | blue       |                           |             |
| 152 | 1820     | I.1.B   | 6.4  | 7.9  | orange     |                           |             |
| 153 | 1821     | I.1.B   | 4.2  | 8.3  | red        |                           |             |
| 154 | 1822     | I.1.B   | 6.1  | 8.1  | orange     |                           |             |
| 155 | 1823     | III.1.A | 5.6  | 4.2  | blue       |                           |             |
| 156 | 1824     | V.2     | 6    | 5.3  | orange     |                           |             |
| 157 | 1825     | V.2     | 5.5  | 4.7  | orange     |                           |             |

| No. | Inv. No. | Type   | H    | D    | Colour     | Place of discovery | Observation |
|-----|----------|--------|------|------|------------|--------------------|-------------|
| 158 | 1826     | V.2    | 5.1  | 3.9  | orange     |                    |             |
| 159 | 1827     | IV.1   | 10.1 | 7.1  | polychrome |                    | fragmentary |
| 160 | 1828     | VII    | 8.8  | 10.1 | green      |                    |             |
| 161 | 1829     |        |      |      | white      |                    |             |
| 162 | 1830     |        |      |      | white      |                    |             |
| 163 | 1831     |        |      |      | white      |                    |             |
| 164 | 1832     | I.1.B  | 5.7  | 11.2 | white      |                    |             |
| 165 | 1833     | I.1.B  | 3.5  | 7.6  | white      |                    |             |
| 166 | 1833     | I.1.B  | 5.2  | 8.7  | white      |                    |             |
| 167 | 1834     | I.1.B  | 5.3  | 8.1  | white      |                    |             |
| 168 | 1835     | I.1.B  | 4.9  | 8.2  | white      |                    |             |
| 169 | 1836     | I.1.B  | 6.02 | 7.05 | blue       |                    |             |
| 170 | 1837     | I.1.B  | 6.05 | 8.5  | blue       |                    |             |
| 171 | 1838     | IV.2.A | 10.5 | 5.4  | green      |                    |             |
| 172 | 1839     | I.1.B  | 6.5  | 8.1  | white      |                    |             |
| 173 | 1840     | I.1.B  | 5.7  | 8.5  | white      |                    |             |
| 174 | 1841     | VII    | 7.9  | 9.4  | green      |                    |             |
| 175 | 1842     | VI     | 11.7 | 7.1  | golden     |                    | 2 pieces    |
| 176 | 1843     | VI     | 11.6 | 7.03 | golden     |                    | 2 pieces    |
| 177 | 1844     | VI     | 12.6 | 8.03 | golden     |                    | 2 pieces    |
| 178 | 1845     | VI     | 14.9 | 7.8  | golden     |                    | 2 pieces    |
| 179 | 1846     | VI     | 12.8 | 6.9  | golden     |                    | 2 pieces    |
| 180 | 1847     | VI     | 6    | 7.4  | golden     |                    | 1 pieces    |
| 181 | 1848     | VI     | 6.6  | 8.6  | golden     |                    | 1 pieces    |
| 182 | 1849     | VII    | 8.8  | 9.4  | green      |                    |             |
| 183 | 1850     | II     |      | 6.5  | white      |                    |             |
| 184 | 1851     | I.1.B  | 4.3  | 9.8  | white      |                    |             |
| 185 | 1852     | IV.2.A | 12.1 | 6.1  | green      |                    |             |
| 186 | 1853     | I.1.B  | 6.03 | 8.1  | blue       |                    |             |
| 187 | 1854     | I.1.B  | 6.8  | 7.1  | blue       |                    |             |
| 188 | 1855     | I.1.B  | 6.02 | 8.9  | white      |                    |             |
| 189 | 1856     | I.1.B  | 5.1  | 9.9  | white      |                    |             |
| 190 | 1857     | I.1.B  | 6.4  | 8.6  | red        |                    | fragmentary |
| 191 | 1858     | I.1.B  | 6.2  | 7.8  | white      |                    |             |
| 192 | 1859     | I.1.B  | 4.2  | 9.3  | white      |                    |             |
| 193 | 1860     | I.1.B  | 8.6  | 12   | white      |                    | fragmentary |
| 194 | 1861     | I.1.B  | 3.6  | 7.5  | white      |                    |             |
| 195 | 1862     | VII    | 7.8  | 8.4  | green      |                    |             |
| 196 | 1863     | IV.2.B | 9.9  | 7.3  | burgundy   |                    |             |
| 197 | 1864     | V.2    | 5.6  | 4    | orange     |                    |             |
| 198 | 1865     | V.2    | 6.09 | 4    | orange     |                    |             |
| 199 | 1866     | V.2    | 4.5  | 4    | orange     |                    |             |
| 200 | 1867     | V.2    | 5.4  | 4    | orange     |                    |             |
| 201 | 1868     | I.1.B  | 7    | 8.8  | orange     |                    |             |
| 202 | 1869     | I.1.B  | 5.8  | 9.4  | orange     |                    |             |
| 203 | 1870     | IV.2.B | 12.6 | 8.9  | red        |                    |             |
| 204 | 1871     | II     | 15.7 | 6.3  | green      |                    |             |
| 205 | 1872     | I.1.B  | 7.4  | 9.1  | green      |                    |             |
| 206 | 1873     | I.1.B  | 7    | 8.6  | green      |                    |             |
| 207 | 1874     | I.1.B  | 6.4  | 7.9  | green      |                    |             |
| 208 | 1875     | I.1.B  | 8.9  | 10.7 | green      |                    |             |

| No. | Inv. No. | Type    | H    | D    | Colour | Place of discovery | Observation |
|-----|----------|---------|------|------|--------|--------------------|-------------|
| 209 | 1876     | I.1.B   | 6.8  | 8.4  | green  |                    |             |
| 210 | 1877     | VII     | 8.4  | 9    | red    |                    |             |
| 211 | 1878     | IV.2.A  | 9.2  | 5    | red    |                    |             |
| 212 | 1879     | II      | 10.3 | 5.7  | red    |                    |             |
| 213 | 1880     | IV.2.A  | 9.4  | 4.9  | green  |                    |             |
| 214 | 1881     |         |      |      | green  |                    |             |
| 215 | 1882     | VI      | 9.9  | 7.5  | green  |                    | 2 pieces    |
| 216 | 1883     | I.1.B   | 6.6  | 5.2  | green  |                    |             |
| 217 | 1884     | I.1.B   |      | 5.5  | green  |                    |             |
| 218 | 1885     | I.1.B   | 6.4  | 5.5  | blue   |                    |             |
| 219 | 1886     | II      | 12.2 | 6.8  | blue   |                    |             |
| 220 | 1887     | IV.2.A  | 10.4 | 6.5  | green  |                    |             |
| 221 | 1896     | IV.2.A  | 10   | 6.5  | green  |                    |             |
| 222 | 1780     | VI      | 8.2  | 9.04 | golden |                    | 1 piece     |
| 223 | 1780     | VI      | 14.8 | 5.9  | golden |                    | 3 pieces    |
| 224 | 1780     | VI      | 4.3  | 5.3  | golden |                    | 1 piece     |
| 225 | 1780     | VI      | 9.5  | 5.4  | golden |                    | 2 pieces    |
| 226 | 1780     | VI      | 7.4  | 5.7  | golden |                    | 2 pieces    |
| 227 | 1758     | IV.2.A  | 12   | 7.5  | green  |                    |             |
| 228 | 1759     | IV.2.A  | 9.7  | 6.9  | green  |                    |             |
| 229 | 1760     | IV.2.A  | 10.7 | 6.9  | green  |                    |             |
| 230 | 1761     | IV.2.A  | 9.9  | 6.8  | green  |                    |             |
| 231 | 1762     | IV.2.A  | 9.6  | 6.1  | green  |                    |             |
| 232 | 1763     | IV.2.A  | 12   | 7.4  | green  |                    |             |
| 233 | 1764     | IV.2.A  | 11.3 | 6.3  | green  |                    |             |
| 234 | 1765     | IV.2.A  | 9.8  | 5.2  | green  |                    |             |
| 235 | 1766     | IV.2.A  | 10.2 | 5.8  | green  |                    |             |
| 236 | 1767     | IV.2.A  | 9.8  | 6.9  | green  |                    |             |
| 237 | 1768     | IV.2.A  | 10.6 | 6.2  | green  |                    |             |
| 238 | 1769     | IV.2.A  | 10.3 | 6    | green  |                    |             |
| 239 | 1770     | IV.2.A  | 10.1 | 6    | green  |                    |             |
| 240 | 1771     | IV.2.A  | 11.1 | 5.7  | green  |                    |             |
| 241 | 1737     | I.1.B   | 5.9  | 6.5  | green  |                    |             |
| 242 | 1738     | III.1.A | 5.4  | 4.1  | green  |                    |             |
| 243 | 1739     | I.1.B   | 7.2  | 7.1  | green  |                    |             |
| 244 | 1740     | III.1.A | 5.6  | 4.5  | green  |                    |             |
| 245 | 1741     | III.1.A | 4.9  | 4.8  | green  |                    |             |
| 246 | 1742     | III.1.A | 5.8  | 4.1  | green  |                    |             |
| 247 | 1743     |         | 5.6  | 5.7  | green  |                    |             |
| 248 | 1744     |         | 5    | 5.3  | green  |                    |             |
| 249 | 1745     |         |      |      | green  |                    |             |
| 250 | 1746     |         |      |      | green  |                    |             |
| 251 | 1747     |         | 6.6  | 6    | green  |                    |             |
| 252 | 1748     |         | 6.8  | 5.7  | green  |                    |             |
| 253 | 1749     | III.1.A | 5.8  | 5.2  | green  |                    |             |
| 254 | 1750     |         | 5.4  | 4.8  | green  |                    |             |
| 255 | 1751     |         | 5.6  | 5.6  | green  |                    |             |
| 256 | 1752     |         | 6.3  | 4.9  | green  |                    |             |
| 257 | 1753     |         | 5.2  | 5.1  | green  |                    |             |
| 258 | 1754     |         | 6    | 5.9  | green  |                    |             |
| 259 | 1755     |         | 8.1  | 5.9  | green  |                    |             |

| No. | Inv. No. | Type    | H    | D    | Colour | Place of discovery                           | Observation |
|-----|----------|---------|------|------|--------|--|-------------|
| 260 | 1756     |         | 5.9  | 5.2  | green  |  |             |
| 261 | 1757     |         | 5.9  | 4.5  | green  |  |             |
| 262 | 1781     | I.1.B   | 9.07 | 14.8 | white  |  |             |
| 263 | 1782     |         |      |      | white  |  |             |
| 264 | 1783     |         |      |      | white  |  |             |
| 265 | 1784     |         |      |      | white  |  |             |
| 266 | 1785     |         |      |      | white  |  |             |
| 267 | 1786     |         |      |      | white  |  |             |
| 268 | 1787     |         |      |      | white  |  |             |
| 269 | 1788     |         |      |      | white  |  |             |
| 270 | 1789     | II      | 13.6 | 9.2  | white  |  |             |
| 271 | 1790     | I.1.B   | 5.4  | 12.6 | white  |  |             |
| 272 | 1791     | I.1.B   | 7.4  | 13.3 | white  |  |             |
| 273 | 1792     | I.1.B   | 6.2  | 11.5 | white  |  |             |
| 274 | 1793     | III.1.B | 10.3 | 5.8  | white  |  |             |
| 275 | 1794     | I.1.B   | 5.3  | 12.5 | white  |  |             |
| 276 | 1795     | I.1.B   | 4.9  | 10.1 | white  |  |             |
| 277 | 1796     | I.1.B   | 6.5  | 12.2 | white  |  |             |
| 278 | 1797     | I.1.B   | 5.6  | 12.3 | white  |  |             |
| 279 | 1798     | III.1.B |      |      | white  |  |             |
| 280 | 1799     |         |      |      | white  |  |             |
| 281 | 1800     |         |      |      | white  |  |             |
| 282 | 1801     |         |      |      | white  |  |             |
| 283 | 1802     | I.1.B   | 7.7  | 10.9 | white  |  |             |
| 284 | 923      | I.1.B   | 9    | 11   | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 285 | 924      | I.1.B   | 5.3  | 8.2  | green  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 286 | 925      | I.1.B   | 3.4  | 7.8  | green  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 287 | 926      | I.1.B   | 5.5  | 10.3 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 288 | 927      | I.1.B   | 8.2  | 8.5  | green  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 289 | 928      | I.1.B   | 6    | 9.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 290 | 929      | I.1.B   | 4    | 4.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 291 | 930      | I.1.B   | 5.9  | 6    | green  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 292 | 931      | I.1.B   | 5.3  | 4.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 293 | 932      | I.1.B   | 6.9  | 6.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 294 | 933      | I.1.B   | 3.2  | 4.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 295 | 934      | I.1.B   | 5.2  | 8.1  | blue   | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 296 | 935      | I.1.B   | 5.9  | 7.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 297 | 936      | I.1.B   | 5.9  | 7.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |

| No. | Inv. No. | Type  | H    | D    | Colour | Place of discovery                           | Observation |
|-----|----------|-------|------|------|--------|--|-------------|
| 298 | 937      | I.1.B | 4.2  | 9.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 299 | 938      | I.1.B | 5    | 8.7  | green  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 300 | 939      | I.1.B | 4.3  | 10.6 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 301 | 940      | I.1.B |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 302 | 941      | I.1.B | 5.8  | 8.4  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 303 | 942      | I.1.B | 5.8  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 304 | 943      | I.1.B | 6.9  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 305 | 944      | I.1.B | 7    | 7.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 306 | 945      | I.1.B |      | 10.6 | blue   | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 307 | 946      | I.1.B | 6.9  | 8    | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 308 | 947      | I.1.B | 5.3  | 9.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 309 | 948      | I.1.B | 3.7  | 8.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 310 | 949      | I.1.B | 4.8  | 7.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 311 | 950      | VI    | 14.3 | 9.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 312 | 951      | I.1.B | 4.2  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 313 | 952      | I.1.B | 5    | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 314 | 953      | I.1.B | 8.7  | 9    | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 315 | 954      | I.1.B | 6.9  | 9.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 316 | 955      | I.1.B | 7    | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 317 | 956      | I.1.B | 5.6  | 8.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 318 | 957      | I.1.B | 7.2  | 7.8  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 319 | 958      | I.1.B | 4.2  | 7.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 320 | 959      | I.1.B | 5    | 9.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 321 | 960      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 322 | 961      | I.1.B |      | 10.6 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 323 | 962      | I.1.B | 6.2  | 7.8  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 324 | 963      | I.1.B | 5.8  | 8.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |

| No. | Inv. No. | Type  | H    | D    | Colour | Place of discovery                           | Observation |
|-----|----------|-------|------|------|--------|--|-------------|
| 325 | 964      | I.1.B | 8.6  | 9.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 326 | 965      | I.1.B | 6.7  | 9    | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 327 | 966      | I.1.B | 7.2  | 9.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 328 | 967      | I.1.B | 8    | 10.3 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 329 | 968      | I.1.B | 9.2  | 10.4 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 330 | 969      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 331 | 970      | I.1.B | 4    | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 332 | 971      | I.1.B | 5.7  | 8.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 333 | 972      | VI    | 11.3 | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 334 | 973      | I.1.B | 3.1  | 7.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 335 | 974      | I.1.B | 6.3  | 7.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 336 | 975      | I.1.B | 4.1  | 8.4  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 337 | 976      | I.1.B | 5.9  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 338 | 977      | I.1.B | 5.3  | 9.3  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 339 | 978      | I.1.B | 6.7  | 9.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 340 | 979      | I.1.B | 9.8  | 7.8  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 341 | 980      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 342 | 981      | I.1.B | 5.3  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 343 | 982      | I.1.B | 6.3  | 9.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 344 | 983      | I.1.B | 6    | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 345 | 984      | I.1.B | 4.2  | 8.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 346 | 985      | I.1.B | 6.1  | 8.4  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 347 | 986      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 348 | 987      | I.1.B | 4.9  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 349 | 988      | I.1.B | 7.5  | 8.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 350 | 989      | I.1.B | 10.2 | 10.8 | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |
| 351 | 990      | I.1.B | 4.3  | 7.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm |             |

| No. | Inv. No. | Type  | H    | D    | Colour | Place of discovery                                | Observation |
|-----|----------|-------|------|------|--------|---|-------------|
| 352 | 991      | I.1.B | 5.7  | 9.4  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm      | translucent |
| 353 | 992      | I.1.B | 5.2  | 9.4  | white  | <i>vicus</i> , building 7, S1/83,<br>H=30 cm      | translucent |
| 354 | 993      | I.1.B | 5.4  | 8.8  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 355 | 994      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 356 | 995      |       |      |      | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 357 | 996      | I.1.B | 7.4  | 7.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 358 | 997      | I.1.B | 5.3  | 8.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 359 | 998      | I.1.B | 5.2  | 9.6  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 360 | 999      | I.1.B | 4.1  | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 361 | 1000     | I.1.B | 4.8  | 7.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 362 | 1001     | I.1.B | 6.4  | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 363 | 1002     | I.1.B | 4.4  | 10   | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 364 | 1003     | I.1.B | 5.3  | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 365 | 1004     | I.1.B | 5.5  | 7.5  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 366 | 1005     | I.1.B | 5.7  | 8.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 367 | 1006     | I.1.B | 3.7  | 7.7  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 368 | 1007     | II    | 13.2 | 8.1  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 369 | 1008     | I.1.B | 4.5  | 9.2  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 370 | 1009     | I.1.B | 6.3  | 7.9  | green  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 371 | 1010     | I.1.B | 6.2  | 9.9  | white  | <i>vicus</i> , building 7, S1/83,<br>H=83 cm      |             |
| 372 | 1011     | I.1.B | 6.6  | 9.4  | white  | <i>vicus</i> , building 7, room 9,<br>H=0–0.35 cm |             |
| 373 | 1012     | II    | 11.7 | 7.5  | white  | <i>vicus</i> , building 7, room 9,<br>H=0–0.35 cm |             |
| 374 | 1013     | I.1.B | 6.1  | 9.3  | white  | <i>vicus</i> , building 7, room 9,<br>H=0–0.35 cm |             |
| 375 | 1014     | I.1.B | 7.1  | 10.8 | white  | <i>vicus</i> , building 7, room 9,<br>H=0–0.35 cm |             |
| 376 | 9063     | VII   | 8    | 9.5  | orange |   | discoloured |
| 377 | 9064     | VII   | 7.8  | 9.2  | orange |   | discoloured |
| 378 | 9065     | VII   | 8.2  | 8.4  | red    |   | discoloured |
| 379 | 9066     | VII   | 8.4  | 9.6  | red    |   | discoloured |
| 380 | 9107     | I.1.B | 7.2  | 8.9  | green  |   |             |
| 381 | 9108     | I.1.B | 4.6  | 6.5  | green  |   |             |







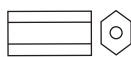
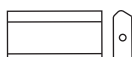




| No. | Inv. No. | Type  | H    | D    | Colour | Place of discovery | Observation |
|-----|----------|-------|------|------|--------|--------------------|-------------|
| 382 | 9109     | I.1.B | 3.6  | 5.8  | green  |                    |             |
| 383 | 9110     | I.1.B | 5.9  | 7.1  | green  |                    |             |
| 384 | 9111     | I.1.B | 5.1  | 6.8  | green  |                    |             |
| 385 | 9112     | I.1.B | 6.6  | 8.2  | green  |                    |             |
| 386 | 9113     | I.1.B | 7.2  | 7.9  | green  |                    |             |
| 387 | 9114     | I.1.B | 6.3  | 7.8  | green  |                    |             |
| 388 | 9115     | I.1.B | 6.1  | 7.7  | green  |                    |             |
| 389 | 9116     | I.1.B | 5.9  | 8.3  | green  |                    |             |
| 390 | 9117     | I.1.B | 4    | 8.9  | green  |                    |             |
| 391 | 9118     | I.1.B | 6.4  | 7.8  | green  |                    |             |
| 392 | 9119     | I.1.B | 8    | 8.3  | green  |                    |             |
| 393 | 9120     | I.1.B | 6.6  | 7.9  | green  |                    | discoloured |
| 394 | 9121     | I.1.B | 6.8  | 10.2 | green  |                    | discoloured |
| 395 | 9122     | I.1.B | 6.3  | 9.7  | green  |                    | discoloured |
| 396 | 9123     | I.1.B | 6.9  | 8.7  | green  |                    | discoloured |
| 397 | 9124     | I.1.B | 7.4  | 8.7  | green  |                    | discoloured |
| 398 | 9125     | I.1.B | 6.7  | 9.2  | green  |                    |             |
| 399 | 9126     | I.1.B | 6.2  | 8.4  | green  |                    | discoloured |
| 400 | 9127     | I.1.B | 5.8  | 7.6  | green  |                    | discoloured |
| 401 | 9128     | I.1.B | 4.6  | 7.6  | green  |                    | discoloured |
| 402 | 9129     | I.1.B | 3.6  | 8.4  | green  |                    | discoloured |
| 403 | 9130     | I.1.B | 4    | 5.7  | green  |                    | discoloured |
| 404 | 9131     | I.1.B | 6.4  | 8.8  | green  |                    | discoloured |
| 405 | 9132     | I.1.B | 6.7  | 7.8  | green  |                    |             |
| 406 | 9133     | I.1.B | 6.8  | 8.1  | green  |                    | discoloured |
| 407 | 9134     | I.1.B | 7.1  | 8.1  | green  |                    |             |
| 408 | 9135     | I.1.B | 6.5  | 9.1  | green  |                    |             |
| 409 | 9136     | I.1.B | 7    | 8.8  | green  |                    |             |
| 410 | 9137     | I.1.B | 5.6  | 8.1  | green  |                    | discoloured |
| 411 | 9138     | I.1.B | 5.4  | 8    | green  |                    | discoloured |
| 412 | 9139     | I.1.B | 6.1  | 8    | green  |                    |             |
| 413 | 9140     | I.1.B | 5.1  | 7.5  | green  |                    |             |
| 414 | 9141     | I.1.B | 5.7  | 7.7  | green  |                    |             |
| 415 | 9142     | I.1.B | 7.3  | 8.7  | green  |                    |             |
| 416 | 9143     | I.1.B | 7.3  | 8.2  | green  |                    |             |
| 417 | 9144     | I.1.B | 5.9  | 7.9  | green  |                    |             |
| 418 | 9145     | I.1.B | 7    | 9.2  | green  |                    |             |
| 419 | 9146     | I.1.B | 7.3  | 8.4  | green  |                    |             |
| 420 | 9147     | I.1.B | 9.1  | 11.4 | green  |                    | discoloured |
| 421 | 9028     | II    | 11.5 | 6.3  | red    |                    | discoloured |
| 422 | 9029     | II    | 12.9 | 7.1  | red    |                    | discoloured |
| 423 | 9030     | II    | 12.9 | 6.8  | red    |                    | discoloured |
| 424 | 9031     | II    | 13.8 | 7    | red    |                    | discoloured |
| 425 | 9032     | II    | 12.1 | 7.2  | red    |                    | discoloured |
| 426 | 9033     | II    | 12.3 | 7.6  | red    |                    | discoloured |
| 427 | 9034     | II    | 13.5 | 7.7  | red    |                    | discoloured |
| 428 | 9035     | II    | 15.6 | 7.8  | red    |                    | discoloured |
| 429 | 9036     | V.1   | 9.8  | 5.9  | white  |                    | discoloured |
| 430 | 9037     | V.1   | 11.2 | 7    | white  |                    | discoloured |
| 431 | 9038     | V.1   | 10.2 | 7.1  | white  |                    | fragmentary |
| 432 | 9039     | V.1   | 10   | 5.7  | white  |                    | discoloured |

| No. | Inv. No. | Type  | H    | D   | Colour | Place of discovery | Observation |
|-----|----------|-------|------|-----|--------|--------------------|-------------|
| 433 | 9040     | V.1   | 7.9  | 5.2 | white  |                    | discoloured |
| 434 | 9041     | V.1   | 8.5  | 5.4 | blue   |                    | discoloured |
| 435 | 9042     | V.1   | 7.8  | 5.4 | white  |                    | discoloured |
| 436 | 9043     | V.1   | 10.6 | 5.4 | white  |                    | discoloured |
| 437 | 9044     | V.1   | 8.9  | 5.8 | white  |                    | discoloured |
| 438 | 9045     | V.1   | 7.7  | 5   | white  |                    | discoloured |
| 439 | 9046     | V.1   | 9.2  | 5.8 | white  |                    | fragmentary |
| 440 | 9047     | V.1   | 8.4  | 5.4 | white  |                    | fragmentary |
| 441 | 9048     | V.1   | 10   | 6.6 | blue   |                    | discoloured |
| 442 | 9049     | V.1   | 8.8  | 5.2 | white  |                    | discoloured |
| 443 | 9050     | V.1   | 9.7  | 5.9 | blue   |                    | discoloured |
| 444 | 9051     | V.1   | 10.3 | 6   | blue   |                    | discoloured |
| 445 | 9052     | V.1   | 8.9  | 5.6 | blue   |                    | discoloured |
| 446 | 9053     | V.1   | 10.6 | 6.8 | white  |                    | discoloured |
| 447 | 9054     | V.1   | 9.2  | 6.6 | white  |                    | discoloured |
| 448 | 9055     | V.2   | 5.3  | 4   | orange |                    | discoloured |
| 449 | 9056     | V.2   | 5.6  | 4.4 | orange |                    | discoloured |
| 450 | 9057     | V.2   | 6.1  | 4.7 | orange |                    | discoloured |
| 451 | 9058     | V.2   | 5.9  | 4.5 | orange |                    | discoloured |
| 452 | 9059     | V.2   | 4.7  | 3.4 | orange |                    | discoloured |
| 453 | 9060     | V.2   | 6.2  | 4.4 | orange |                    | discoloured |
| 454 | 9061     | V.2   | 5.8  | 4.4 | orange |                    |             |
| 455 | 9062     | V.2   | 5.4  | 3.6 | orange |                    | discoloured |
| 456 | 9067     | I.1.B | 6.3  | 8.3 | white  |                    |             |
| 457 | 9068     | I.1.B | 5.9  | 7.6 | white  |                    |             |
| 458 | 9069     | I.1.B | 6.5  | 8.3 | white  |                    |             |
| 459 | 9070     | I.1.B | 7.1  | 9.2 | white  |                    |             |
| 460 | 9071     | I.1.B | 6.2  | 7.5 | white  |                    |             |
| 461 | 9072     | I.1.B | 5    | 8.2 | white  |                    |             |
| 462 | 9073     | I.1.B | 6.8  | 8.1 | white  |                    |             |
| 463 | 9074     | I.1.B | 7.4  | 7.9 | white  |                    |             |
| 464 | 9075     | I.1.B | 5.3  | 7   | white  |                    |             |
| 465 | 9076     | I.1.B | 7    | 7.4 | white  |                    |             |
| 466 | 9077     | I.1.B | 5.7  | 7.5 | white  |                    |             |
| 467 | 9078     | I.1.B | 5.6  | 8.1 | white  |                    |             |
| 468 | 9079     | I.1.B | 6.8  | 7.8 | white  |                    |             |
| 469 | 9080     | I.1.B | 5.9  | 8.1 | white  |                    |             |
| 470 | 9081     | I.1.B | 5.4  | 6.3 | white  |                    |             |
| 471 | 9082     | I.1.B | 6.4  | 8.6 | white  |                    |             |
| 472 | 9083     | I.1.B | 6    | 8   | white  |                    |             |
| 473 | 9084     | I.1.B | 6.8  | 7.8 | white  |                    |             |
| 474 | 9085     | I.1.B | 4.8  | 8.4 | white  |                    |             |
| 475 | 9086     | I.1.B | 6    | 8.2 | white  |                    |             |
| 476 | 9087     | I.1.B |      | 6.7 | white  |                    |             |
| 477 | 9088     | I.1.B | 6    | 7.8 | white  |                    |             |
| 478 | 9089     | I.1.B | 6.4  | 7.9 | white  |                    |             |
| 479 | 9090     | I.1.B | 6.9  | 8.1 | white  |                    |             |
| 480 | 9091     | I.1.B | 7.5  | 8.9 | white  |                    |             |
| 481 | 9092     | I.1.B | 5    | 6.9 | white  |                    |             |
| 482 | 9093     | I.1.B | 6.1  | 8.9 | white  |                    |             |
| 483 | 9094     | I.1.B | 6.3  | 7.6 | white  |                    |             |

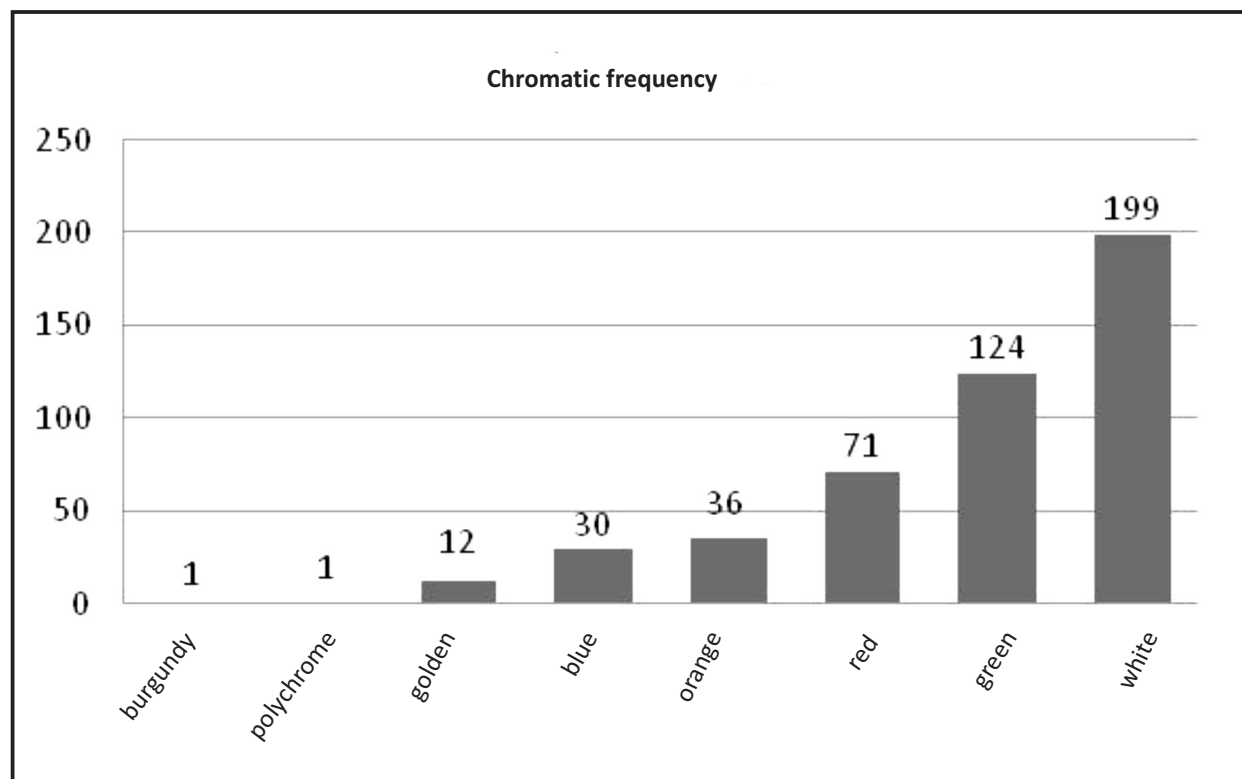
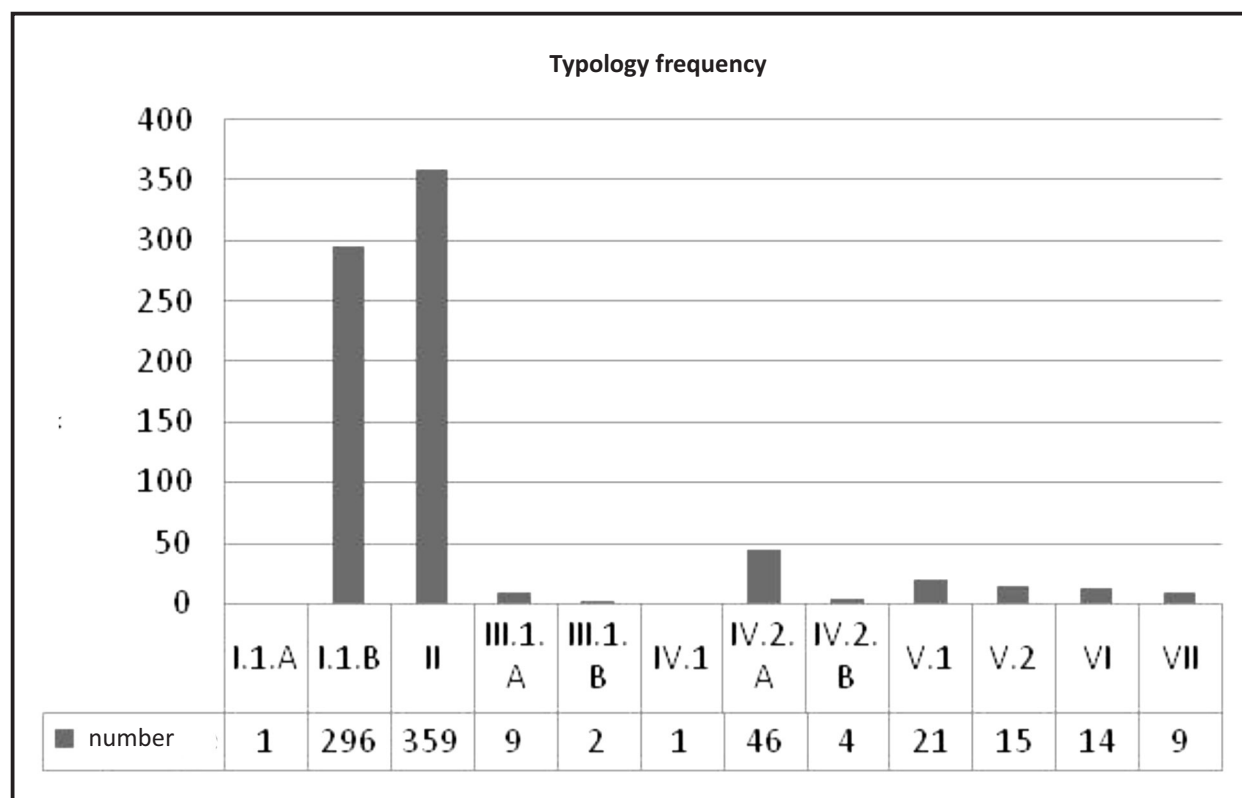
| No. | Inv. No. | Type  | H    | D   | Colour | Place of discovery | Observation                 |
|-----|----------|-------|------|-----|--------|--------------------|-----------------------------|
| 484 | 9095     | I.1.B | 5.7  | 8.5 | white  |                    |                             |
| 485 | 9096     | I.1.B | 8.1  | 7.8 | white  |                    |                             |
| 486 | 9097     | I.1.B | 6.4  | 8.2 | white  |                    |                             |
| 487 | 9098     | I.1.B | 5.6  | 8.8 | white  |                    |                             |
| 488 | 9099     | I.1.B | 5.2  | 6.9 | white  |                    |                             |
| 489 | 9100     | I.1.B | 5.7  | 7.8 | white  |                    |                             |
| 490 | 9101     | I.1.B |      | 9.1 | white  |                    |                             |
| 491 | 9102     | I.1.B | 5.9  | 8.6 | white  |                    |                             |
| 492 | 9103     | I.1.B | 5.9  | 7.6 | white  |                    |                             |
| 493 | 9104     | I.1.B | 5.8  | 7.8 | white  |                    |                             |
| 494 | 9105     | I.1.B | 6.6  | 8.8 | white  |                    |                             |
| 495 | 9106     | I.1.B | 5.3  | 8.3 | white  |                    |                             |
| 496 | 9001     | II    | 10.7 | 5.2 | red    |                    | discoloured                 |
| 497 | 9002     | II    | 12.3 | 5   | red    |                    |                             |
| 498 | 9003     | II    | 11.2 | 5.5 | red    |                    | discoloured                 |
| 499 | 9004     | II    | 11.8 | 6.2 | red    |                    | discoloured                 |
| 500 | 9005     | II    | 11   | 5.2 | red    |                    | discoloured                 |
| 501 | 9006     | II    | 9.4  | 4.5 | red    |                    | discoloured                 |
| 502 | 9007     | II    | 11.8 | 5.3 | red    |                    | discoloured                 |
| 503 | 9008     | II    | 12   | 5.6 | red    |                    | discoloured                 |
| 504 | 9009     | II    | 13.3 | 6.4 | red    |                    | discoloured                 |
| 505 | 9010     | II    | 11.5 | 6.8 | red    |                    | discoloured                 |
| 506 | 9011     | II    | 10.8 | 5.9 | red    |                    | discoloured                 |
| 507 | 9012     | II    | 11   | 6.3 | red    |                    | fragmentary                 |
| 508 | 9013     | II    | 11.8 | 5.3 | red    |                    | fragmentary,<br>translucent |
| 509 | 9014     | II    | 9.9  | 5.6 | red    |                    | discoloured                 |
| 510 | 9015     | II    | 9.5  | 4.3 | red    |                    | discoloured                 |
| 511 | 9016     | II    | 10.2 | 5.5 | red    |                    | discoloured                 |
| 512 | 9017     | II    | 10.9 | 5   | red    |                    | discoloured                 |
| 513 | 9018     | II    | 12.3 | 5   | red    |                    | discoloured                 |
| 514 | 9019     | II    |      | 6   | red    |                    | discoloured                 |
| 515 | 9020     | II    | 14.1 | 5.6 | red    |                    | discoloured                 |
| 516 | 9021     | II    |      | 6.2 | red    |                    | fragmentary                 |
| 517 | 9022     | II    | 13.3 | 6.1 | red    |                    | discoloured                 |
| 518 | 9023     | II    | 16   | 6.1 | red    |                    | discoloured                 |
| 519 | 9024     | II    | 12   | 6.2 | red    |                    | 2 pieces                    |
| 520 | 9025     | II    | 11   | 6.4 | red    |                    | discoloured                 |
| 521 | 9026     | II    | 11.2 | 5.7 | red    |                    | discoloured                 |
| 522 | 9027     | II    | 12.4 | 6.6 | red    |                    | discoloured                 |

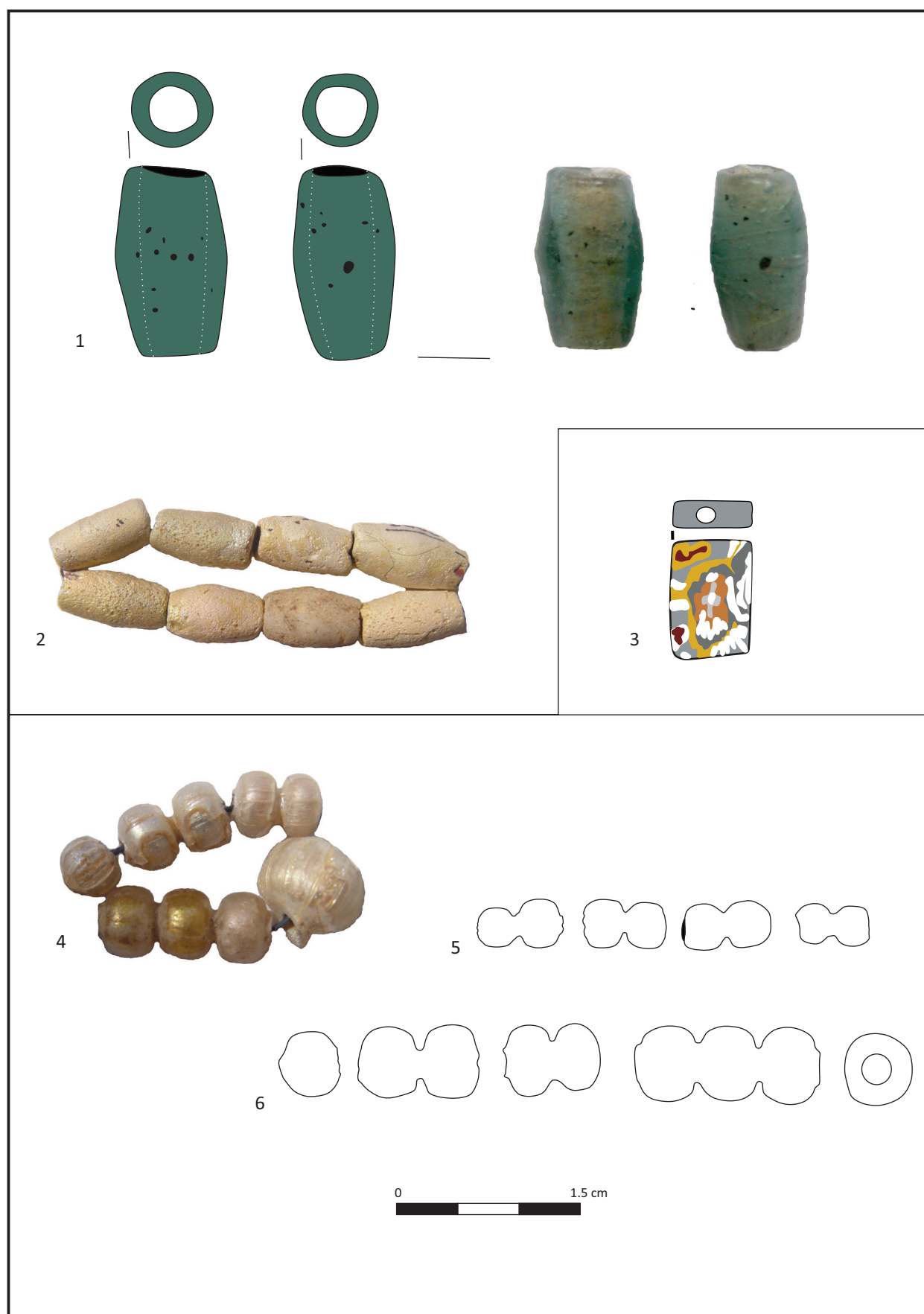
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| Type | Subtype | Variation | H<br>mm  | D<br>mm  | w<br>h<br>i<br>t<br>e | b<br>u<br>r<br>g<br>u<br>n<br>d. | o<br>r<br>a<br>n<br>g<br>e | r<br>e<br>d | g<br>r<br>e<br>e<br>n | b<br>l<br>u<br>e | g<br>o<br>l<br>d<br>e<br>n | p<br>o<br>l<br>y<br>c<br>h. | Form  |
|------|---------|-----------|----------|----------|-----------------------|----------------------------------|----------------------------|-------------|-----------------------|------------------|----------------------------|-----------------------------|---|
| I    | 1       | A         | 3.9      | 3.7      |                       |                                  | X                          |             |                       |                  |                            |                             |    |
|      |         | B         | 3.1–10.2 | 4.5–14.8 | X                     |                                  | X                          | X           | X                     | X                |                            |                             |    |
| II   |         |           | 8.8–16.4 | 4.3–9.2  | X                     |                                  | X                          | X           | X                     | X                |                            |                             |    |
| III  | 1       | A         | 4.9–6.5  | 3.9–5.4  | X                     |                                  | X                          |             | X                     | X                |                            |                             |    |
|      |         | B         | 10.3     | 5.8      | X                     |                                  |                            |             |                       |                  |                            |                             |    |
| IV   | 1       |           | 10.1     | 7.1      |                       |                                  |                            |             |                       |                  |                            | X                           |   |
|      | 2       | A         | 8.5–12.7 | 4.6–7.5  | X                     |                                  |                            | X           | X                     | X                |                            |                             |  |
|      |         | B         | 9.9–16.8 | 7.3–12.5 | X                     | X                                |                            | X           |                       |                  |                            |                             |  |
| V    | 1       |           | 7.7–11.2 | 5–7.1    | X                     |                                  |                            | X           |                       | X                |                            |                             |  |
|      | 2       |           | 4.5–6.9  | 3.4–5.3  |                       |                                  | X                          |             | X                     |                  |                            |                             |  |
| VI   |         |           | 4.3–14.9 | 5.3–9.1  | X                     |                                  |                            |             |                       |                  | X                          |                             |  |
| VII  |         |           | 7.8–8.8  | 8.4–10.1 |                       |                                  | X                          | X           | X                     |                  |                            |                             |  |

Pl. I. Types of beads from County Museum of Ethnography and Border Regiment, Caransebeș.





**Pl. III.** 1, 2 – Type II (no. 8997–8998, 9028–9035); 3 – Type IV.1, polychrome glass bead (no. 1827); 4 – Type VI, gold beads (no. 1780, 1842–1848).



Pl. IV. 1 – no. 3207–3234; 2 – no. 1781–1802; 3 – no. 1806–1895; 4 – no. 9001–9020.

# NEW CONTRIBUTIONS ON THE EARRINGS DECORATED WITH CURLED WIRE

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**Keywords:** earrings, cemetery, grave, curled wire, bronze, Middle Age.

**Abstract:** *The present paper intends to complete the study published in Apulum XLVI, 2009. Seven new discoveries of earrings with curled wire (some of them elder discoveries, but inadequately published, other deficient in terms of dating), one of them unpublished, are taken into discussion. Based on*

*the mentioned discoveries, this paper proposed a new analysis of the ornaments and a catalogue of the items unknown or unpublished in 2009.*

*The author's attention focuses on a new typology of the earrings decorated with curled wire, on the territorial distribution of the ornaments on the earrings, on the dating of the new patterns and the chronological groups of the adornments.*

Since the issue of the paper on the earrings decorated with curled wire<sup>1</sup>, several items displaying this adornment may be found in the specialty literature. They are added by other two unpublished items discovered in Dridu (Ialomița county)<sup>2</sup>, respectively Fierbinți-Malul Roșu<sup>3</sup>, in the same county. I held necessary to resume this subject as since 2009 and until presently I have had access to new items, partly unknown. This is added by the fact that in the meantime other adornments have been published, adornments to which I had no access at the time of drawing of the previous paper. Others have been published with brief descriptions or without an adequate illustration or description. The important volume of new earrings of which partly are currently unique items on the territory of Romania require a review of the items.

In order not to resume the descriptions of the items of the previous paper, I shall include in the register only those items that need to be added as they are not included in the old paper. It must be also specified that chronologically, the dating will remain the same for the previously studied items, but the new adornments require several specifications, especially from a structural point of view.

Compared to the previous paper (Pl. 5), we may add the items of Suceava-Câmpul Șanțurilor<sup>4</sup>, Cuptoare-Sfocea<sup>5</sup>, Drobeta-Turnu Severin<sup>6</sup>, Orașul de Floci<sup>7</sup>, Vaslui-Church Sf. Ioan Botezătorul<sup>8</sup> and Liteni-Dealul Țiganului<sup>9</sup>.

<sup>1</sup> OȚA ET AL 2009, p. 65–82.

<sup>2</sup> The item has been given to me for publication by Mrs. Eugenia Zaharia.

<sup>3</sup> The item belongs to the MNIR inventories. It was discovered by Bogdan Filipescu. The necropolis is in course of publication by S. Oța.

<sup>4</sup> OȚA 2012, p. 223, 241, Pl. 6–8.

<sup>5</sup> UZUM 1987, p. 297, Fig. 4/b, p. 298–299; OȚA 2008, p. 233, Pl. 56/7–8, ȚEICU 2009, p. 50, 79, Pl. 29/5–6, p. 262, Fig. 22.

<sup>6</sup> TUDOR 1976, p. 126, Pl. VII/7, p. 128.

<sup>7</sup> ANTON-MANEA 2000, p. 115, 127, Fig. 54.

<sup>8</sup> BUTNARIU ET AL 2007, p. 109–110.

<sup>9</sup> MATEI ET AL 1982, p. 81–82, 185, Fig. 44/7–8; BUTNARIU ET AL 2007, p. 110.

## REGISTRY OF DISCOVERIES

### 1. CUPTOARE (Cornea village, Caraș-Severin County)

**Location:** Sfogea

**M. 252.** flat; single interment; inhumation; depth 0.60 m; V-E; body laid out in supine position with arms on the abdomen and the skull with the eyes overlooking to the east; **inventory:** 1–2) two silver earrings, decorated with two silver-foil spheres on which wire circles have been attached (Pl. 1/24). The link is made of laminated silver bar (D=2 mm) and has an attachment earlet on one end. The spheres (D=1.05 cm) were attached on the link with silver wire and between them one may notice a circular moulding of filigree wire, arc-shaped bent (link D =3.6 cm, maximum D measured over the spheres=3.8 cm, weight=4.3 gr/item). They were discovered near the skull.

**Bibliography:** UZUM 1987, p. 297, Fig. 4/b, p. 298–299; OȚA 2008, p. 233, Pl. 56/7–8; ȚEICU 2009, p. 50, 79, Pl. 29/5–6, p. 262, Fig. 22.

### 2. DRIDU (Dridu village, Ialomița County)

**Location:** at the confluence of Ialomița and Prahova rivers.

**Observations:** 1) The earring (of tin gilded bronze; Pl. 1/23). The link is made of simple wire, circularly cut (D=25.2 mm, wire D=1.6 mm). The central setting is manufactured of two hemispheres attached in the central area (D=13.3 mm, L=11 mm). The decoration consists of pseudogranules. On one of the two halves, namely the left one, the decoration consists of four parallel rows of pseudogranules.

The lateral decorations consist of two mouldings of spirally wrapped filigree wire. The wire that fastens the decoration elements begins to be wrapped around the link from the left of the first moulding, it passes through it and then continues on the link until the central appliqué, it passes over the latter and follows the same stages as thus far. Weight=3.76 gr.

**Bibliography:** unpublished.

### 3. DROBETA-TURNU SEVERIN (municipality, Mehedinți County)

**Observations:** 1) The earring was found by the diggings of Gr. G. Tocilescu (Pl. 1/20). The link is made of wire, with a flattened end, bent outward in the shape of a loop. Two groups of curled wire may be noticed on the link. On both their sides, simple wire has been wrapped around the link. The space between the two groups is free, which leaves us with three possible choices of interpretation. The first would be that part of the curled wire has been lost. Another possibility would be that this was the original shape of the item and the last possibility leads us to think that a potential wire wrapped on the link in this area is missing.

**Bibliography:** TUDOR 1976, p. 126, Pl. VII/7, p. 128.

### 4. FIERBINȚI (city, Ialomița County)

**Location:** Malul Roșu

**Observations:** A medieval necropolis has been studied here in the late 70-s and the early 80-s. 1) The earring was discovered or purchased in the year 1982 on December 5<sup>th</sup> (Pl. 1/18). The link is of simple wire, circularly cut. Two distanced curled wires are around it. Between them and on their sides, simple wires have been wrapped around the link. Wire D=1.3 mm, link D=23.6 mm, mouldings D=8.6 mm, Weight=1.78 gr.

**Bibliography:** unpublished.

### 5. LITENI (Liteni city, Suceava County)

**Location:** Dealul Țiganului

**M. 75.** The grave inventory contained 1–2) pair of bronze earrings (Pl. 1/21–22). The link is made of circularly cut wire, with a flattened end bent outward and the other one in the shape of a

perforated rhomb. The decoration consists of a spiralled wire tube, wrapped four times around the link. On each of its sides, simple wire has been wrapped around the link.

**Bibliography:** MATEI ET AL 1982, p. 81–82, 185, Fig. 44/7–8; BUTNARIU ET AL 2007, p. 110.

## 6. ORAȘUL DE FLOCI (Giurgeni village, Ialomița County)

**Location:** ?

**Observations:** 1) The earring (Pl. 1/12; MNIR, inventory no. 138014) was discovered in the year 1977, in S. XVIII, 10–20 panes and it is a *passim*. The link is of simple wire, circularly cut, deformed and deteriorated. On each side of the deformed decoration, simple curled wire has been wrapped. Wire D=1 mm, link D=14.5 mm.

**Bibliography:** ANTON-MANEA 2000, p. 115, 127, Fig. 54.

## 7. SUCEAVA (municipality, Suceava County)

**Location:** Câmpul Sanțurilor

**M. 12.** flat; single interment; inhumation; NV-SE; – 0.90 m; inventory: 1) earring (or earrings), with question mark-shaped rod (Pl. 2/5), with the lower part ending in a loop. Curled wire has been wrapped around it and in the lower part there is sphere made of two caps.

**M.60.** Inhumation; individual; V-E; – 0.70 m; inventory: 1) Ottoman coin used as a medallion; 2) Strand of glass beads, light blue, brown and red and bells; 3) earring (or earrings) similar with the item in M. 12.

**M. 106.** Inhumation; single interment; NV-SE; – 1.00 m; inventory: 1) earring (or earrings), similar with the item in M. 12 and M. 60.

**M. 123.** inventory: 1) earring (or earrings), similar with the item in M. 12, M. 60 and 106.

**Bibliography:** MITREA ET AL 1953, p. 361, 362, Fig. 25/3–5, p. 363, Fig. 26/2; BATARIUC 1993, p. 241, 244, 245; OȚA 2012, p. 223, 241, Pl. 6–8.

## 8. SUCIDAVA (Corabia city, Olt County)

**Location:** Celei.

**Observations:** Several adornments and clothing accessories were found in the necropolis of the fifteenth century. Among these, there is 1) an earring decorated with twisted wire forming small loops (Pl. 1/13). The link is made of simple wire, circularly cut. On both its sides, the decoration has wire wrapped around the link. The item has been dated to the fifteenth century. According to the description, there are more such items manufactured of “silvered brass”. They are most probably of bronze and tin gilded.

Link D=23 mm; decoration D=6 mm.

**Bibliography:** TOROPU, TĂTULEA 1987, p. 201, Fig. 62, right.

## 9. VASLUI (municipality, Vaslui County)

**Location:** Church Sf. Ioan Botezătorul

**Observations:** Discovered in the necropolis 1–2) pair of plated bronze earrings (Pl. 1/16–17). The link is made of circularly cut wire. One end is flattened and loop-bent. The opposite end is rhombic, perforated in the centre. The decoration consists of curled wire wrapped around the link. On both its sides, the link has been wrapped in wire.

**Bibliography:** BUTNARIU ET AL 2007, p. 109–110.

The new group of items was found mainly through archaeological research developed in necropolises (Cuptoare-Sfogeia, Liteni-Dealul Țiganului, Orașul de Floci, Sucidava-Celei, Vaslui-Church Sf. Ioan Botezătorul) but there are also items randomly discovered, without a known context (Dridu,

Fierbinți-Malul Roșu-?). In one case, the earring was discovered following archaeological research that has been documented only partially (Drobeta-Turnu Severin)<sup>10</sup>.

Depending on the shape of the link and the attachment of the decoration, we may distinguish<sup>11</sup>:

I. Links of simple wire, circle shaped bent. Among these, depending on the display of the decoration, the following types are distinguished:

I.a. Compact decoration (Alba Iulia-Stația de Salvare, Pl. 1/1, Coconi-Căldarea, Pl. 1/2, Craiova-Făcăi, Pl. 1/3–5, Dridu-La Metereze, Pl. 1/6, Liteni-Dealul Țiganului, Pl. 1/20–21, Nufăru-La Piatră, Pl. 1/9, Orașul de Floci, Păcuiul lui Soare-Byzantine fortification, Pl. 1/7–8, Portărești-Cetățuie, Pl. 1/10–11, Sucidava-Celei, Trifești, Pl. 1/15, Vaslui-Church Sf. Ioan Botezătorul). This may be on:

I.a.1. Simple link (Alba Iulia-Stația de Salvare, Coconi-Căldarea, Craiova-Făcăi, Dridu-La Metereze, Drobeta-Turnu Severin, Nufăru-La Piatră, Orașul de Floci, Păcuiul lui Soare-Byzantine fortification).

I.a.2. Link with one end loop-shaped bent and the other one rhombic, perforated (Liteni-Dealul Țiganului, Pl. 1/20–21, Suceava, Pl. 1/14, Trifești, Pl. 1/15, Vaslui-Church Sf. Ioan Botezătorul, Pl. 1/16–17).

I.b. Distanced decoration. Two sub-types may be distinguished in this case:

I.b.1. Simple spiralled wire mouldings (Fierbinți-Malul Roșu, Pl. 1/18).

I.b.2. Two distanced decorations, separated by wire wrapped around the link (Drobeta-Turnu Severin, Pl. 1/20, Trifești, Pl. 1/19).

I.c. Secondary decoration on simple link (Dridu, Pl. 1/23). The mouldings are of filigree wire, are loop-bent and flank on a sphere decorated with pseudogranules.

I.d. Secondary decoration on the link with a loop at one end. The moulding made of loop-bent filigree wires is between two spheres decorated with wire circles (Cuptoare-Sfogeia, Pl. 1/24).

I.e. Decoration on the cone, with a disc at the basis (Isaccea, Pl. 2/1–2)<sup>12</sup>. Only the appliqué has been kept, while the link is missing. It is very likely that these items were similar with the ones discovered at Niš<sup>13</sup> in Serbia and Kočani<sup>14</sup> in Macedonia. In the first case, the appliques were hung on simple links.

II. Question mark-shaped earrings.

II.a. The decoration is compact, fastened on the rod (Craiova-Fântâna Obedeanu, Pl. 2/3–4).

II.b. Compact decoration, followed by a metallic sphere attached on another rod fastened at the end of the other one (Suceava-Câmpul Șanțurilor, Pl. 2/5).

They are also added by the items in Borniș-Mălești (Pl. 2/6–7) and Hudum-Dealul Hudumului, necropolis 1 (Pl. 2/8), but unfortunately these are partially destroyed and cannot be typologically classified although it is quite obvious that at least the items in the first locality belong to another model. The items documented as being discovered in Borniș-Siliște, Cetățeni-Muscel and Cetatea Neamțului are in the same situation.

<sup>10</sup> In order not to resume each particular aspect, a fact which however would not bring substantial changes, I left apart the discussion of each particular type of link and other issues discussed in the older paper. I found more useful to discuss the typology of the items the way it may be currently discussed, in terms of the newer analyzed items which I did not have available in 2008.

<sup>11</sup> The analysis will take into account all the discoveries, including the ones published in the 2009 paper.

<sup>12</sup> I chose to transfer here the earrings type III of 2009 because the decoration was most probably attached to a simple link, as proven by the items at Niš.

<sup>13</sup> MINIĆ 1987, p. 74, Fig. I/4; ERČEGOVIĆ-PAVLOVIĆ 1976 (1977), p. 96, T. IX, M. 38/5–6.

<sup>14</sup> MANEVA 1992, p. 136, Pl. 16/24/8.

## CONCLUSIONS

On the Romanian territory, five areas of distribution of the earrings decorated with curled wire may be distinguished. The first one is Northern Dobrogea, with the discoveries in Nufăru-La Piatră<sup>15</sup> and Isaccea<sup>16</sup>. North of the Danube, they were discovered between the basin of the Ialomița river and Dâmbovița river up to the Danube, in Păcuiul lui Soare-Byzantine fortification<sup>17</sup>, Fierbinți-Malul Roșu, Dridu-La Metereze<sup>18</sup>, Orașul de Floci, Cetățeni<sup>19</sup> and Coconi-Căldarea<sup>20</sup>. Only one isolated item was discovered in Transylvania, at Alba Iulia-Stația de Salvare<sup>21</sup>, and in Moldova, they occurred predominantly in the Northern half (Suceava-Câmpul Șanțurilor<sup>22</sup>, Hudum-Dealul Hudumului, necropolis 1<sup>23</sup>, Trifești<sup>24</sup>, Târgu Neamț-Cetatea Neamțului<sup>25</sup>, Liteni-Dealul Țiganului and Borniș-Siliște<sup>26</sup> and Mălești<sup>27</sup>) and only one isolated case towards the South, at Vaslui-Church Sf. Ioan Botezătorul. The last area is represented the Eastern Banat and Oltenia, with the items of Cuptoare-Sfogeia, Drobeta-Turnu Severin, Craiova-Fântâna Obedeanu, Portărești-Cetățuie and Sucidava-Celei.

Several types of earrings are distinguished in each of the five distribution areas, except for Transylvania. Thus, three types are found in Muntenia, two in Northern Dobrogea, six in Moldova and five in the Eastern Banat and Oltenia.

As regards the chronology of the new items, they do not raise particular dating problems. The earrings of Vaslui-Church Sf. Ioan Botezătorul are similar with the one discovered in Suceava at the beginning of the twentieth century.

The item of Drobeta-Turnu Severin is almost identical with the item found in Trifești. Unfortunately, it has been framed among the adornments of the Roman age and we have no exact information on the context of the discovery. Three other medieval items were recovered from there, namely a hair pin decorated at the end with a sphere ornamented with the filigree technique and two rhombic buckles. Based on the analogies in Arača, the last two clothing accessories can be dated to the end of the thirteenth century or the beginning of the following century<sup>28</sup>. The earring in Trifești indicates a similar dating.

From a typological point of view, the earring discovered in Fierbinți-Malul Roșu displays fair analogies to the items discovered at the Middle Danube, dated to the twelfth century. The unacquaintance with the context prevents us currently from other considerations on its chronology.

<sup>15</sup> DAMIAN 1993, p. 100, Fig. 11/1, p. 110; DUMITRIU 2001, p. 40, Taf. 78/10; IONIȚĂ 2005, p. 80, note 94; OȚA ET AL 2009, p. 68.

<sup>16</sup> VASILIU 1984, p. 121, 133, 529, Pl. V/4a-b; DUMITRIU 2001, p. 40, Taf. 18/1-2; OȚA ET AL 2009, p. 68.

<sup>17</sup> DIACONU, BARASCHI 1977, p. 123, Fig. 97/25, 28; DAMIAN 1993, p. 99; DUMITRIU 2001, p. 40, Taf. 81/28, 31; IONITA 2005, p. 80, note 94; POPOVICI 1987, p. 180, note 64; OȚA ET AL 2009, p. 69.

<sup>18</sup> IONIȚĂ 1996-1998, p. 311, 379, Fig. 49/1; DUMITRIU 2001, p. 40, 122, Taf. 90/9; IONIȚĂ 2005, p. 128, 220, Fig. 48/16; OȚA ET AL 2009, p. 69.

<sup>19</sup> CONSTANTINESCU 1972, p. 101, note 117; POPOVICI 1987, p. 180, note 63; DAMIAN 1993, p. 99; OȚA ET AL 2009, p. 71.

<sup>20</sup> CONSTANTINESCU 1972, p. 101, 247, Pl. XIII/8; DAMIAN 1993, p. 99; DUMITRIU 2001, p. 40, 116, Taf. 87/8; IONIȚĂ 2005, p. 80, note 92; POPOVICI 1987, p. 180, note 62; OȚA ET AL 2009, p. 69.

<sup>21</sup> CIUGUDEAN 1996, p. 27, Fig. 53; DUMITRIU 2001, p. 40; IAMBOR 2005, p. 404, Pl. LXXV/53; IONIȚĂ 2005, p. 80; OȚA ET AL 2009, p. 67.

<sup>22</sup> ROMSTORFER 1913, p. 87, Pl. XI, left; POPOVICI 1987, p. 180, note 61; DAMIAN 1993, p. 101; OȚA ET AL (2009), p. 70, Pl. I/19, p. 71.

<sup>23</sup> SPINEI, POPOVICI-BALTĂ 1985, p. 81, Fig. 5/7; POPOVICI 1987, p. 179, note 60; DAMIAN 1993, p. 101; IONIȚĂ 2005, p. 80; OȚA ET AL 2009, p. 68, 70, Pl. I/9.

<sup>24</sup> SPINEI 1982, p. 241, Fig. 2/20-21; SPINEI 1986, p. 240, 241, Fig. 2/20-21; POPOVICI 1987, p. 179, note 59; DAMIAN 1993, p. 101; SPINEI 1994, p. 464, Fig. 30/12-13; DUMITRIU 2001, p. 40; IONIȚĂ 2005, p. 80, note 93; OȚA ET AL 2009, p. 68, 70, Pl. I/20-21.

<sup>25</sup> CONSTANTINESCU 1972, p. 101, note 117; POPOVICI 1987, p. 179, note 57; DAMIAN 1993, p. 101; OȚA ET AL 2009, p. 71.

<sup>26</sup> POPOVICI 1987, p. 179, note 58; DAMIAN 1993, p. 101; OȚA ET AL 2009, p. 69.

<sup>27</sup> POPOVICI 1985, p. 178, Fig. 6/6-7, p. 179-180; DAMIAN 1993, p. 101; OȚA ET AL 2009, p. 69, 70, Pl. I/12-13.

<sup>28</sup> STANOJEV 2004, p. 57, T. III/18/M. 4, p. 59, T. V/69/M. 9, p. 65, T. VIII/112, p. 74.

From a typological point of view and in terms of execution, I have dated the item of Dridu to the end of the thirteenth century and the beginning of the fourteenth century<sup>29</sup>.

The item discovered at Sucidava cannot be closely dated given to the fact that currently we have no analogies, not as much as in the Balkan area. According to the chronology of the necropolis there, it appears to belong to the fifteenth century.

The pair of earrings at Cuptoare-Sfogeia has fair analogies to the items discovered in the necropolis of Kaliakra, dated to the thirteenth-fourteenth centuries<sup>30</sup>. The three items here are slightly different among them, in the sense that the ones that have a wire moulding do not have wire circles on the appliqués and the one that has the latest mentioned decoration does not have anymore or never had the moulding.

Given to the fact that it was not found in a closed complex, the earring at Orașul de Floci may be chronologically framed only with a margin of error to the sixteenth century, although it must not be excluded as belonging to the end of the previous century.

The earrings at Liteni-Dealul Țiganului are slightly different in terms of execution from the other items. The difference consists in the execution of the loop at the end of the link and in the presence of the tightened, not loose curled wire. Unfortunately, given to the lack of coins or other precise dating elements (stratigraphy, analysis of the position of the graves inside the cemetery, etc), we may not accurately state that they belong to the fourteenth or the fifteenth centuries. At the current stage of research, they still remain a unique discovery on the Romanian territory. An earring manufactured relatively similar was found in Slovakia but it is in the same situation, it has no other more precise dating elements<sup>31</sup>.

Regional chronological differences may be noticed on the whole as regards the decoration motif but also from the point of view of the items' structure. On this line, several chronological groups are distinguished.

1. The first comprises items of three areas. The first (1a; Pl. 3/1) is represented by the item of Alba Iulia-Stația de Salvare<sup>32</sup>, the second (1b) comprises items of the Northern Dobrogea (Isaccea, Nufăru-La Piatră) and the last one (1c) the earrings at Dridu-La Metereze and Fierbinți-Malul Roșu. These adornments may be dated to the eleventh-twelfth centuries, possibly to the early thirteenth century.

2. The second comprises (Pl. 3/2) locations of five different areas: Oltenia (2a; Drobeta-Turnu Severin, Craiova-Fântâna Obedeianu, Portărești-Cetățuie), South-Eastern Banat (Cuptoare-Sfogeia (2b), Central Muntenia (2c; Dridu), South-Eastern Muntenia and South-Western Dobrogea (2d; Coconi-Căldarea, Păcuiul lui Soare-Byzantine fortification) and Northern Moldova (2e; Hudum-Dealul Hudumului, necropolis 1, Trifești, Liteni-Dealul Țiganului). These items belong to the end of the thirteenth century and the fourteenth century.

3. The third (Pl. 4/3) comprises three locations in distinct areas: South-Eastern Oltenia (3a; Sucidava-Celei), Eastern Moldova (3b; Vaslui-Church Sf. Ioan Botezătorul) and Northern Moldova (3c; Suceava-Câmpul Șanțurilor). Chronologically, the earrings can be dated to the end of the fourteenth century and the fifteenth century.

4. The last chronological group (Pl. 4/4) is formed by the late items, namely the items of Borniș (4a), in Moldova (the seventeenth century) and Orașul de Floci (4b) in Muntenia (the sixteenth century).

<sup>29</sup> S. OȚA, *An earring decorated with curled wire discovered at Dridu*. Article under print in SCIVA magazine.

<sup>30</sup> BOBČEVA 1978, p. 166, 170, 173, Tab. VI/M.63/2, Tab. X/M.158/1, Tab. XII/M.220/1.

<sup>31</sup> Our thanks go to Mr. Gabriel Fusek for the notice.

<sup>32</sup> As regards the dating of the item here, given the presence of other Balkan (Byzantine) tradition adornments, it must be rather dated to the end of the eleventh century or even to the following century. The lack of systematic publishing of the research conducted here is however limiting me from further assessments.

One may notice that in the five geographical areas except for the one at Alba Iulia-Stația de Salvare and the Northern Dobrogea, the decoration was used for longer periods of time, namely from the twelfth century until the sixteenth century and even the seventeenth century.

The periods of maximum employment were during the eleventh-twelfth centuries and the thirteenth-fourteenth centuries. The last one of them comprises the most of the decoration models, namely eight, in ten locations (Cuptoare-Sfogea-1, Hudum-Dealul Hudumului, necropolis 1, Trifești, Dridu, Liteni-Dealul Țiganului, Păcuiul lui Soare-Byzantine fortification, Coconi-Căldarea, Drobeta-Turnu Severin, Craiova-Fântâna Obedeianu, Portărești-Cetățuie).

The decoration was used preponderantly in the Balkan environment, should we consider the earliest discoveries in terms of area of distribution and items associated with these necropoleis. Here it had the longest period of utilization. While in the Pannonian area it disappeared gradually, it continued to be used outside the Carpathian Arch and South of the Danube. As they were relatively cheap, the earlier earrings were manufactured especially for the common population. To this regard, it is relevant the utilization of bronze, occasionally tin-gilded, in their manufacturing (Dridu).

Beginning with the second half of the eleventh century and the twelfth century, the types of earrings became diversified. They were discovered in important centres such as Alba Iulia-Stația de Salvare, Isaccea, Nufăru-La Piatră. This particularity is given especially by the return of the Byzantine Empire at the Danubian border during the age of Emperor Vasile the Second (976–1025). Between its emperorship and the time of deposition of the Byzantine jewellerys of the eleventh century inside the graves, one may notice the passing of a short period of time. Moreover, starting with this period one may also notice a change in the types of adornments belonging to the Byzantine fashion, as the old types of the previous centuries were largely abandoned. Only some decoration elements were kept such as the granule moulding but in most of the cases it has been associated with other decoration motifs.

Beginning with the end of the thirteenth century and during the fourteenth century, the decorative motif spreads even more, in addition to the old types. The curled wire begun to be associated with other decoration elements and even filigreed and then curled (Cuptoare-Sfogea, Dridu). The discoveries in the abovementioned chronological interval are also available in the vicinity of several fortifications (Drobeta-Turnu Severin, Păcuiul lui Soare-Byzantine fortification, Coconi-Căldarea, Dridu, Fierbinți-Malul Roșu) or important centres (Craiova-Fântâna Obedeianu) and less in the rural environment (Hudum-Dealul Hudumului, necropolis 1, Trifești, Liteni-Dealul Țiganului).

In the course of the fifteenth century they were discovered in important centres such as Suceava-Câmpul Șanțurilor, Sucidava-Celei or Vaslui-Church Sf. Ioan Botezătorul. The changes in terms of execution of the link, noticeable since the thirteenth-fourteenth centuries (the link with a flattened, loop-shape bent end and the opposite end in the shape of a perforated rhomb) continued and even became diversified, such as some items discovered in Suceava.

Only one item from the sixteenth century was discovered, in Orașul de Floci<sup>33</sup>. It is not different from the initial items, the ones dated to the eleventh-fourteenth centuries.

Regarding the seventeenth century we only have one item discovered at Borneș. Unfortunately it is fragmented and its shape cannot be remodelled.

Even the other discoveries in Târgu Neamț-Cetatea Neamțului and Cetățeni indicate the fact that they are manufactured by urban or borough workshops, thereupon spreading in the rural environment.

The earlier items dated to the eleventh-twelfth centuries are widespread especially in the lower basin of the Danube. For the most part of the thirteenth century, the earrings cannot be dated based on more restricted chronological intervals, but the utilization of the curled wire seems to be slightly

<sup>33</sup> According to the dimensions, the earring belonged most probably to a child. Small-sized adornments manufactured especially for children, similar in terms of execution and model with the ones manufactured for adults have also been discovered for instance at Bucșani (Giurgiu county). Our thanks go to our colleague Cătălin Bem for providing us with the information.

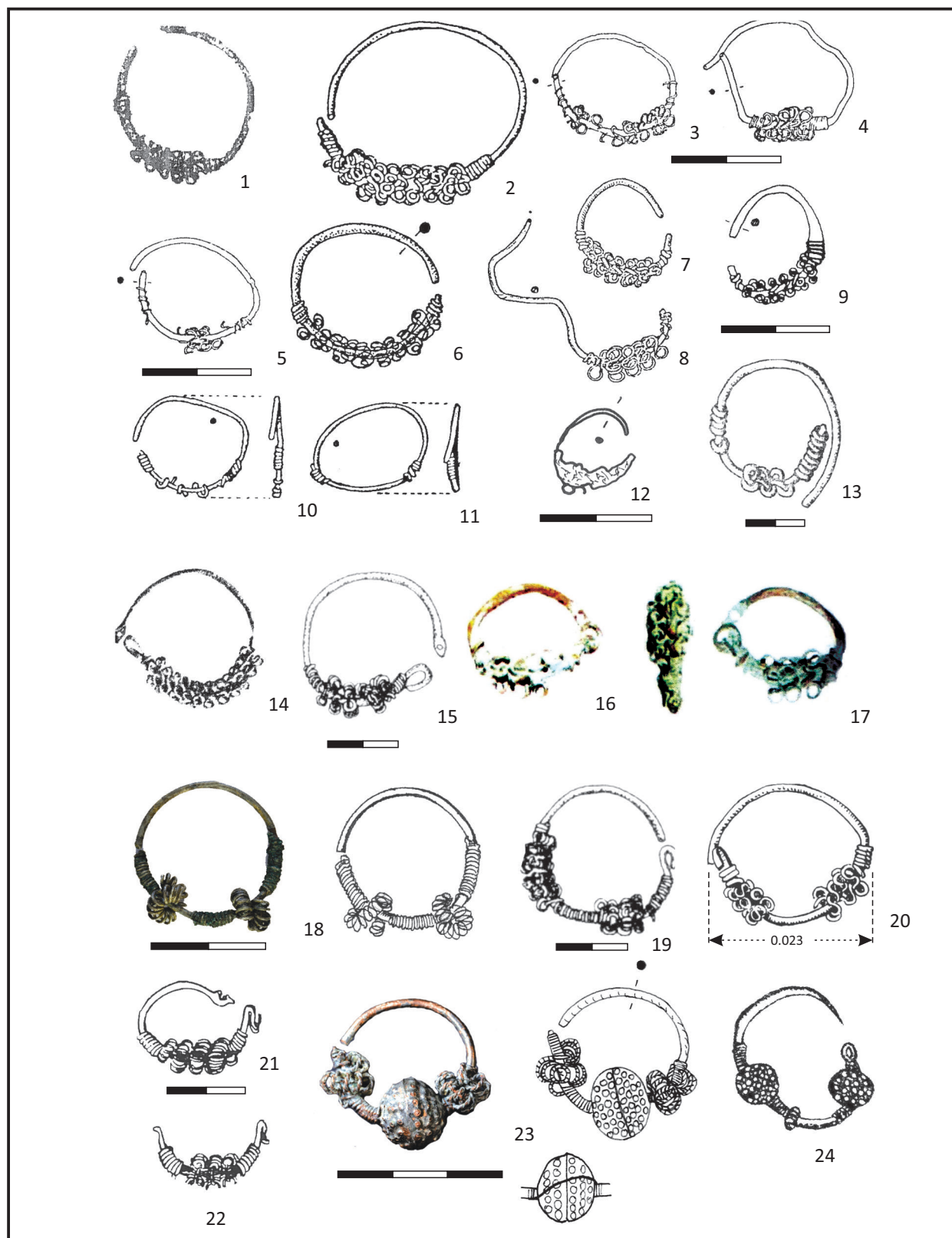
dimmed. Its return is noticed only to the end of the century and the highest utilization is reached in the fourteenth century when the decoration became widespread in Oltenia and Moldova. In the fifteenth century it remained in use especially in Moldova and it has been discovered in only one case in Oltenia.

Translated by ALEXANDRA DECU

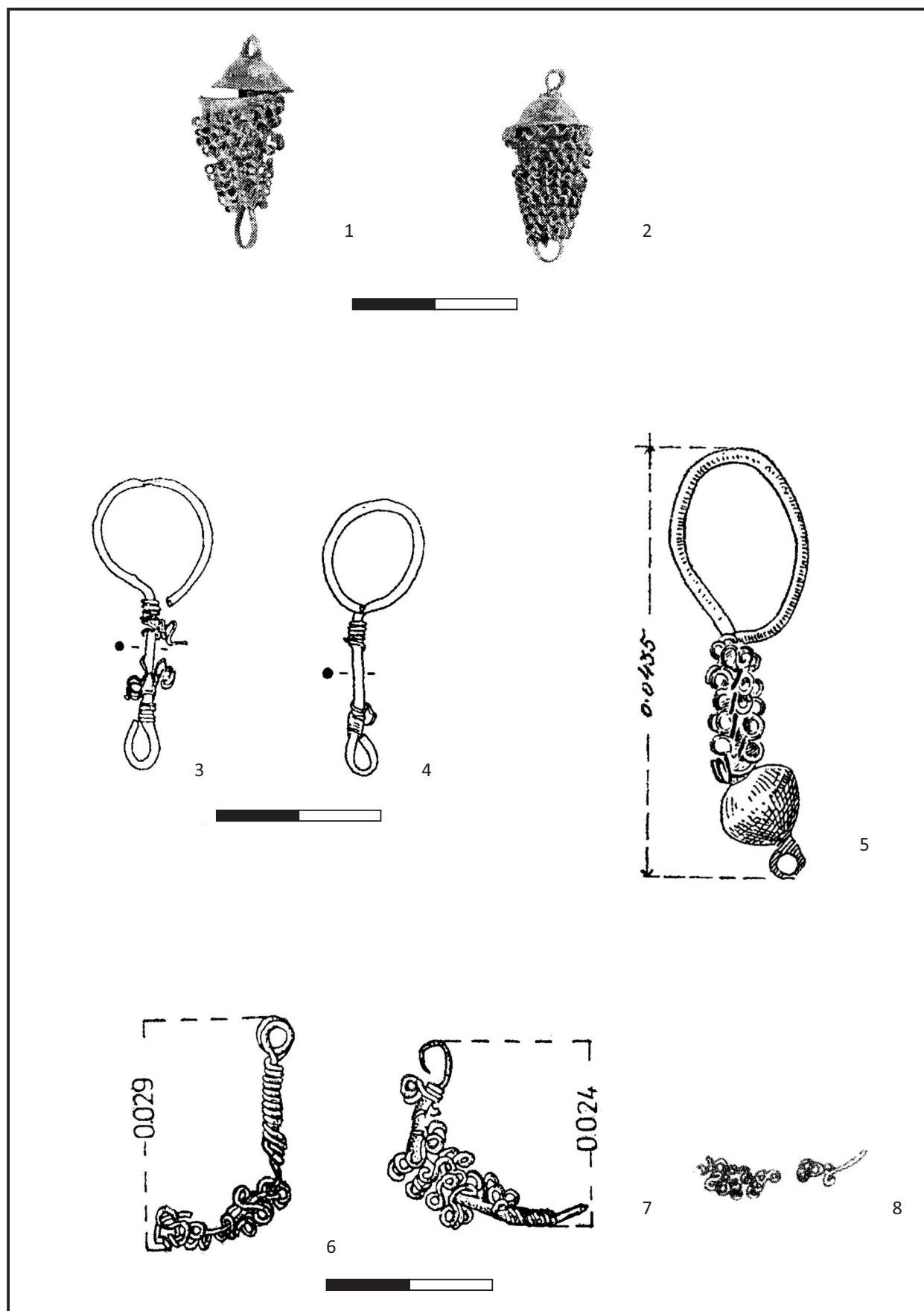
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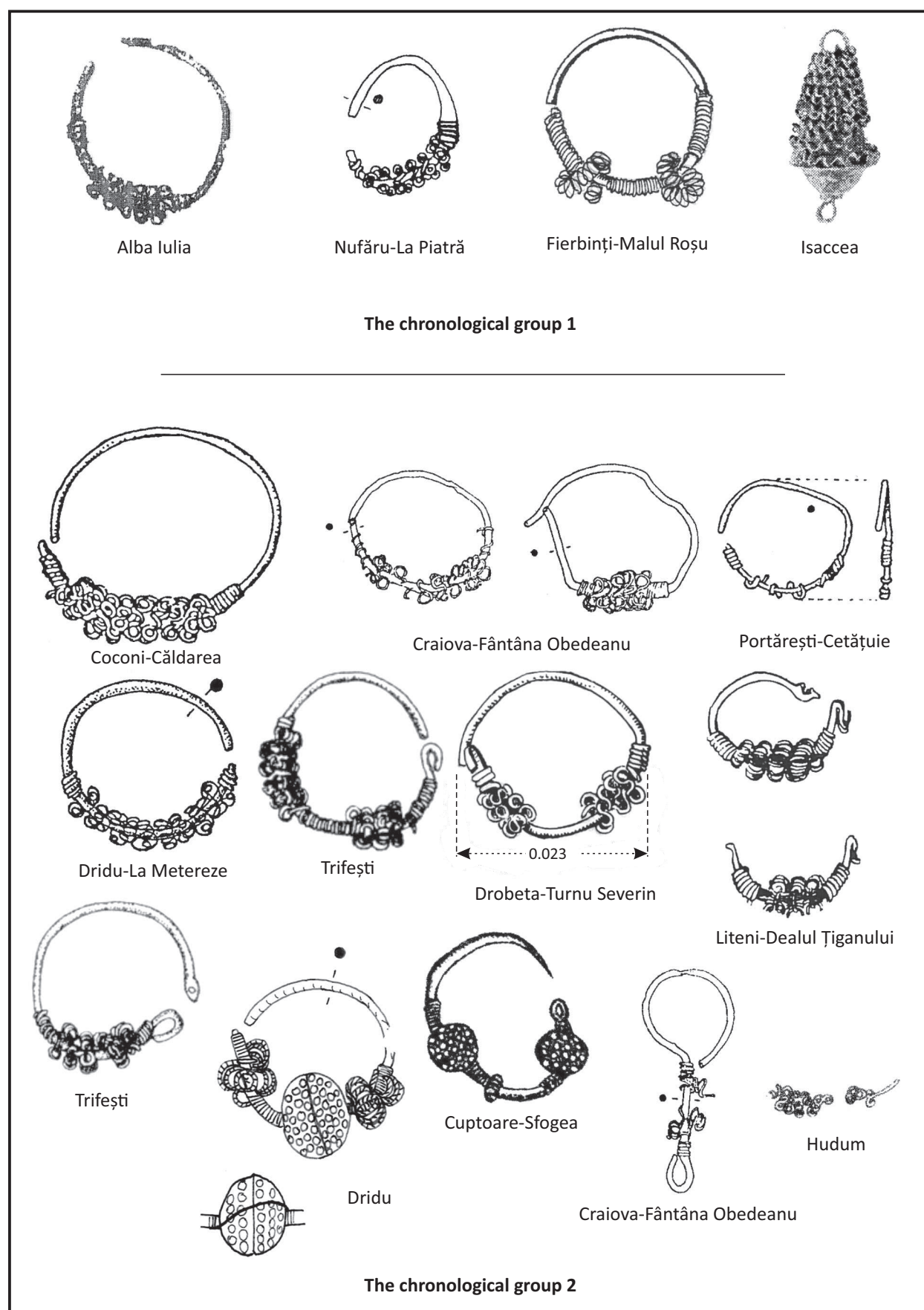
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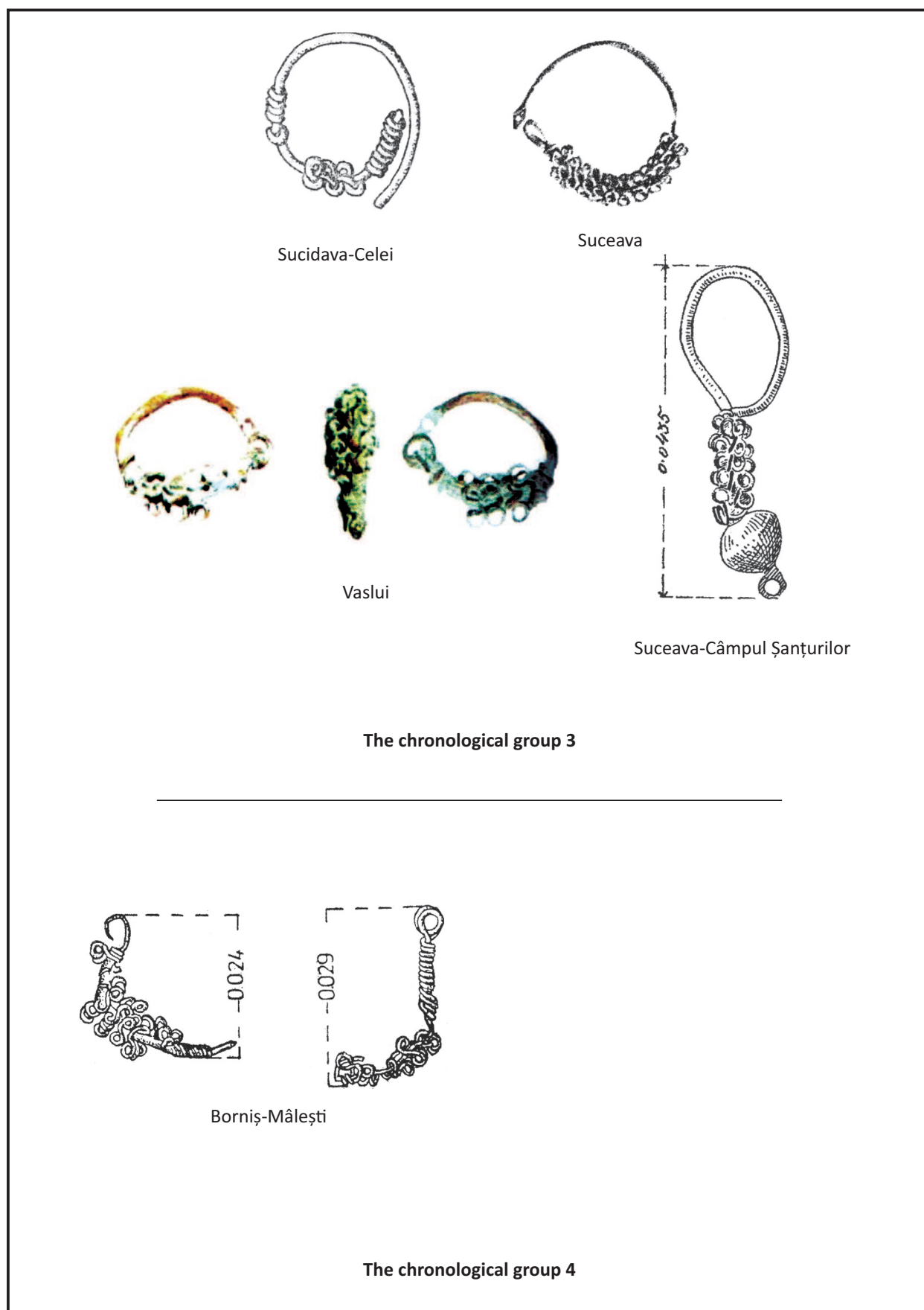
**Pl. 1.** Typology of items. 1. Alba Iulia-Stația de salvare (according to CIUGUDEAN 1996; no scale); 2. Coconi-Căldarea (according to CONSTANTINESCU 1972; no scale); 3–5. Craiova-Fântâna Obedeauu (according to DUMITRIU 2001); 6. Dridu-La Metereze (according to IONIȚĂ 1996-1998); 7–8. Păcuiul lui Soare-Byzantine fortification (according to DIACONU, BARASCHI 1977; no scale); 9. Nufăru-La Piatră (according to DAMIAN 1993); 10–11. Portărești-Cetățuie (according to DUMITRIU 2001); 12. Orașul de Floci; 13. Sucidava-Celei (according to TOROPU, TĂTULEA 1987); 14. Suceava (according to ROMSTORFER 1913; no scale); 15, 18. Trifești (according to SPINEI 1991); 16–17. Vaslui-Church Sf. Ioan (according to BUTNARIU ET AL 2007; no scale); 18. Fierbinți-Malul Roșu; 20. Drobeta-Turnu Severin (according to TUDOR 1976); 21–22. Liteni-Dealul Țiganului (according to MATEI ET AL 1982); 23. Dridu.



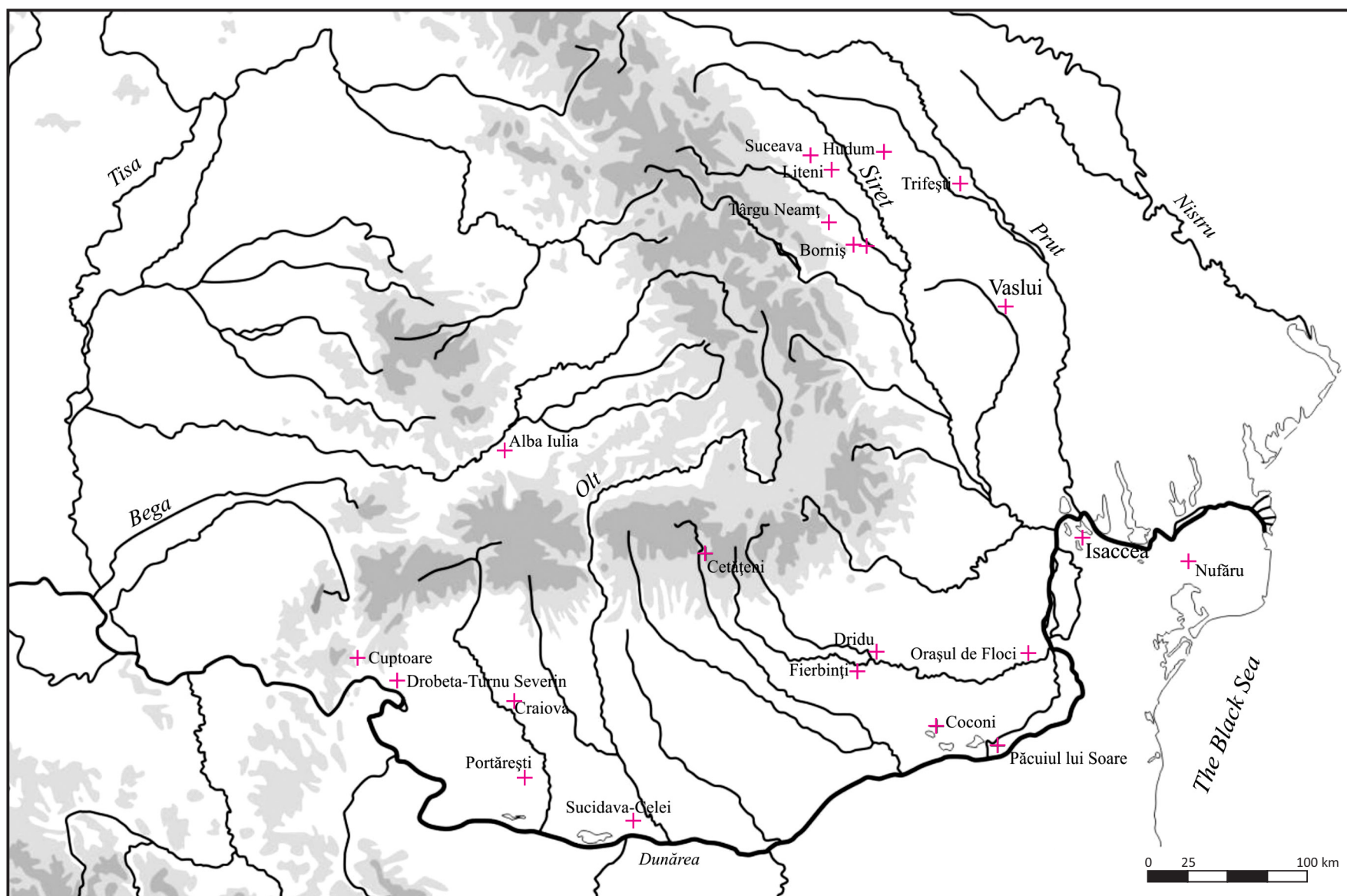
**Pl. 2.** Tipology of items. 1–2. Isaccea; 3–4. Craiova-Fântâna Obedeauu (according to DUMITRIU 2001); 5. Suceava-Câmpul Șanțurilor (according to MITREA ET AL 1953); 6–7. Borniș-Mâlești (according to POPOVICI 1985); 8. Hudum (according to SPINEL, POPOVICI-BALTĂ 1985).



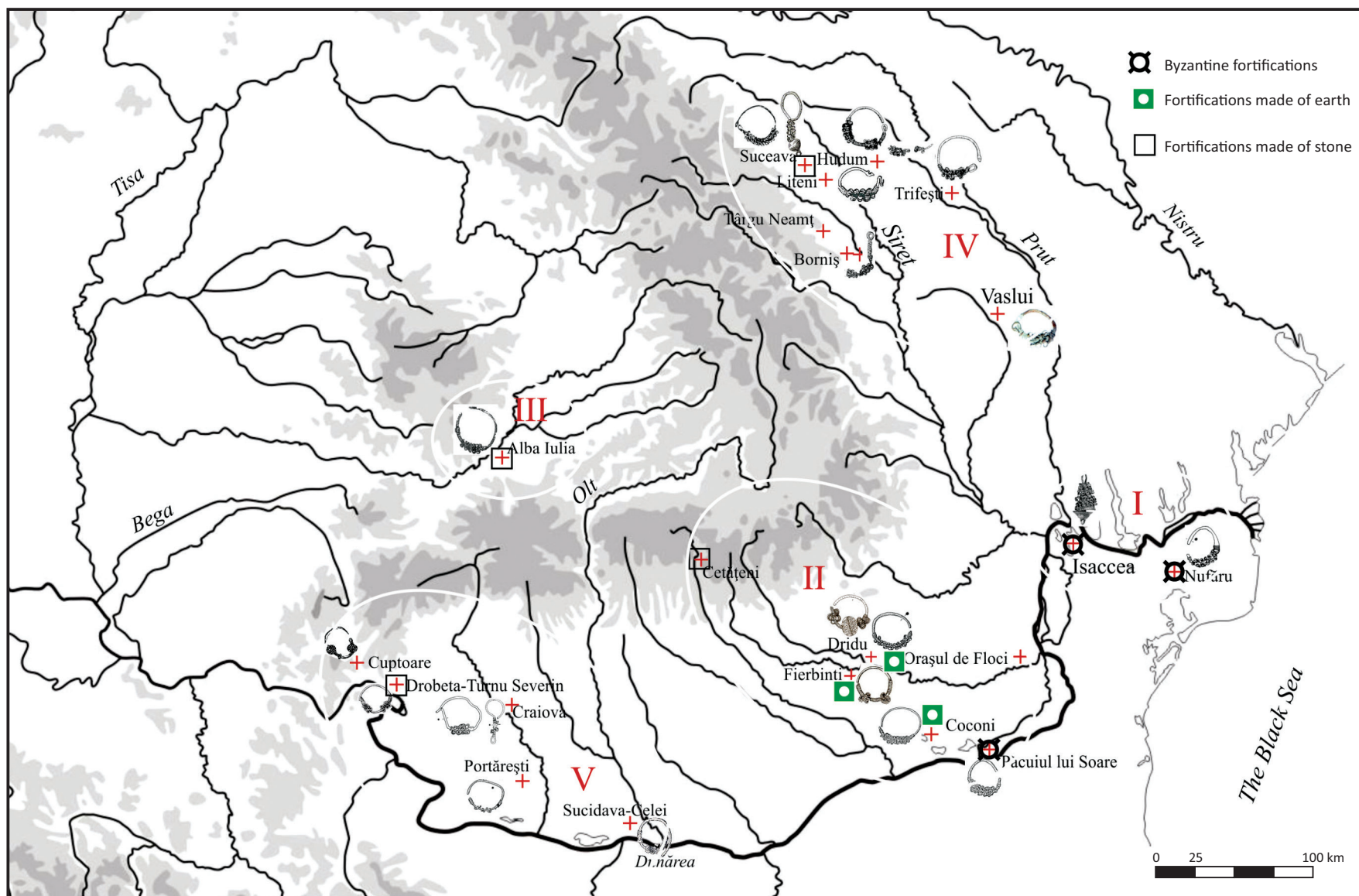
Pl. 3. Chronological groups 1 and 2.



**Pl. 4.** Chronological groups 3 and 4.



**Pl. 5.** The distribution of the earrings decorated with spiralled wire on the territory of Romania.



Pl. 6. The areas of distribution of the earrings decorated with spiralled wire on the territory of Romania.

## ABBREVIATIONS

|                     |  |
|---------------------|--|
| ActaArchHung        | – Acta Archaeologica Academiae Scientiarum Hungaricae, Budapesta.  |
| ActaMN              | – Acta Musei Napocensis, Cluj-Napoca.  |
| ActaS               | – Acta Siculica, Miercurea Ciuc.   |
| ActaTS              | – Acta Terrae Sempemcatrensis, Sibiu.  |
| AÉ                  | – Archaeologiai Értesitő, Budapesta.   |
| AIIA                | – Anuarul Institutului de Istorie și Arheologie, Cluj-Napoca.  |
| Aluta               | – Aluta, Sfântu Gheorghe.  |
| ARA                 | – Annual Review of Anthropology, Palo Alto.  |
| AnB                 | – Analele Banatului, Timișoara.  |
| Antaeus             | – Antaeus. Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungaricae, Budapest.                  |
| Antiquity           | – Antiquity, Cambridge, Newbury.   |
| Apulum              | – Apulum. Acta Musei Apulensis, Alba Iulia.  |
| ArchMos             | – Archaeologia Mosellana.  |
| ArhRadRasprave      | – Arheološki Radovi i Rasprave, Zagreb.  |
| ArhVestnik          | – Arheološki Vestnik, Ljubljana.   |
| ArhMold             | – Arheologia Moldovei, Iași.   |
| АСГЭ                | – Археологический Сборник Государственного Эрмитажа, Спб.  |
| BAM                 | – Brukhental. Acta Musei, Sibiu.   |
| Banatica            | – Banatica, Reșița.  |
| BAR                 | – British Archaeological Reports, International Series, Oxford.  |
| BCȘS                | – Buletinul Cercetărilor Științifice Studentești, Universitatea 1 Decembrie, Alba Iulia.                           |
| BerRGK              | – Bericht der Römisch-Germanischen Kommission des Deutschen Archäologischen Instituts, Frankfurt am Main – Berlin. |
| BHAUT               | – Bibliotheca Historica et Archaeologica Universitatis Timisiensis, Timișoara.                                     |
| BudRég              | – Budapest régiségei, Budapest.  |
| BullSocAnthropol    | – Bulletins de la Société d'anthropologie de Paris.  |
| CA                  | – Cercetări arheologice, București.  |
| CCA                 | – Cronica Cercetărilor Arheologice.  |
| Corviniana          | – Corviniana. Acta Musei Corvinensis, Hunedoara.   |
| Crisia              | – Crisia, Oradea.  |
| Dacia               | – Dacia. Revue d'Archéologie et d'Histoire Ancienne, București.  |
| DP                  | – Documenta praehistorica, Ljubljana.  |
| DolgSzeg            | – Dolgozatok, Szeged.  |
| Dolgozatok –Travaux | – Dolgozatok –Travaux, Budapesta.  |
| Drobeta             | – Drobeta, Drobeta - Turnu Severin.  |
| EphNap              | – Ephemeris Napocensis, Cluj-Napoca.   |
| EJA                 | – European Journal of Archaeology.   |

|                    |   |
|--------------------|---|
| FoliaArch          | – Folia Archaeologica, Budapesta.   |
| Germania           | – Germania. Anzeigen der Römisch–Germanischen Kommission des Deutschen Archäologischen Instituts, Frankfurt am Main.                |
| GlasnikSAD         | – Гласник Српског археолошког друштва [Journal of Serbian archaeological society], Belgrad.   |
| Godišnjak Sarajevo | – Godišnjak Centra za Balkanološka Ispitivanja Akademije Nauka i Umjetnosti, Bosne i Hercegovine, Sarajevo.                         |
| Ialomița           | – Ialomița. Studii și comunicări, Slobozia.   |
| IDR                | – Inscriptiones Daciae Romanae; I.I. Russu (red.) Inscriptiile Daciei Romane, București.  |
| Instrumentum       | – Instrumentum Bulletin du Groupe de travail européen sur l'artisanat et les productions manufacturées dans l'Antiquité, Montagnac. |
| Izvestija Varna    | – Izvestija na Narodnija Muzej, Varna.  |
| JAS                | – Journal of Archeological Science  |
| JRGZM              | – Jahrbuch Des Römisch-Germanischen Zentralmuseums, Mainz.  |
| Klio               | – Klio. Beiträge zur Geschichte, Leipzig.   |
| КСИА               | – Краткие Сообщения Института Археологии АН СССР, Москва  |
| КСИИМК             | – Краткие Сообщения Института Историй и Материальной Культуры, Москва.  |
| MCA                | – Materiale și cercetări arheologice, București.  |
| MFME-StudArch      | – A Móra Ferenc Múzeum Évkönyve, Szeged.  |
| MI                 | – Magazin Istoric. Revista de Cultură Istorică, București.  |
| ΜΩΜΟΣ              | – ΜΩΜΟΣ, Ōskoros Kutatók Összjöttelenek konferenciakötete,  |
| OpArch             | – Opuscula Archaeologica. Skrifter utgivna av Svenska institutet i Rom, Zagreb.   |
| PA                 | – Patrimonium Apulense, Alba Iulia.   |
| PBF                | – Praehistorische Bronzefunde, Berlin.  |
| Peuce              | – Peuce. Studii și comunicări de istorie veche, arheologie și numismatică, Tulcea.  |
| Pontica            | – Pontica. Studii și materiale de istorie, arheologie și muzeografie, Constanța.  |
| PZ                 | – Praehistorische Zeitschrift, Berlin – Leipzig.  |
| Petničke sveske    | – Petničke sveske, Beograd.   |
| PrehistAlp         | – Prehistoria Alpina, Trento.   |
| Prilozi            | – Prilozi Instituta za arheologiju u Zagrebu  |
| RVM                | – Rad Vojvodjanskih Muzeja, Novi Sad.   |
| Sargetia           | – Sargetia. Acta Musei Devensis, Deva.  |
| SCIVA              | – Studii și Comunicări de Istorie Veche și Arheologie, București.   |
| Starinar           | – Starinar, Belgrad.  |
| StArch             | – Studia Archaeologica, Roma.   |
| StudiaUBB-H        | – Studia Universitatis „Babes-Bolyai”. Historia, Cluj-Napoca.   |

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| SympThrac      | – Symposia Thracologica, București.  |
| Talanta        | – Τάλαντα. Proceedings of the Dutch Archaeological and Historical Society.               |
| TD             | – Thraco-Dacica, București.  |
| Tibiscum       | – Tibiscum. Studii și comunicări, Caransebeș.  |
| Tibiscus       | – Tibiscus, Timișoara.   |
| Topoi          | – Τόποι. Orient – Occident.  |
| VAHD           | – Vjesnik za Arheologiju i Historiju Dalmatinsku, Split.                                 |
| Várak          | – Várak. Kastélyok, Templomok  |
| Viminacium     | – Viminacium. Zbornik radova Narodnog muzeja   |
| WorldA         | – World Archaeology, Oxford.   |
| Ziridava       | – Ziridava, Arad.  |
| ZPE            | – Zeitschrift für Papyrologie und Epigraphik, Köln.                                      |
| Župski zbornik | – Župski zbornik: časopis za istorijska, kulturološka i prirodnjačka istraživanja, Župe. |